Joint Capabilities Integration and Development System (JCIDS) and the Defense Acquisition System (DAS)

Requirements and Acquisition Management
In the 21st Century

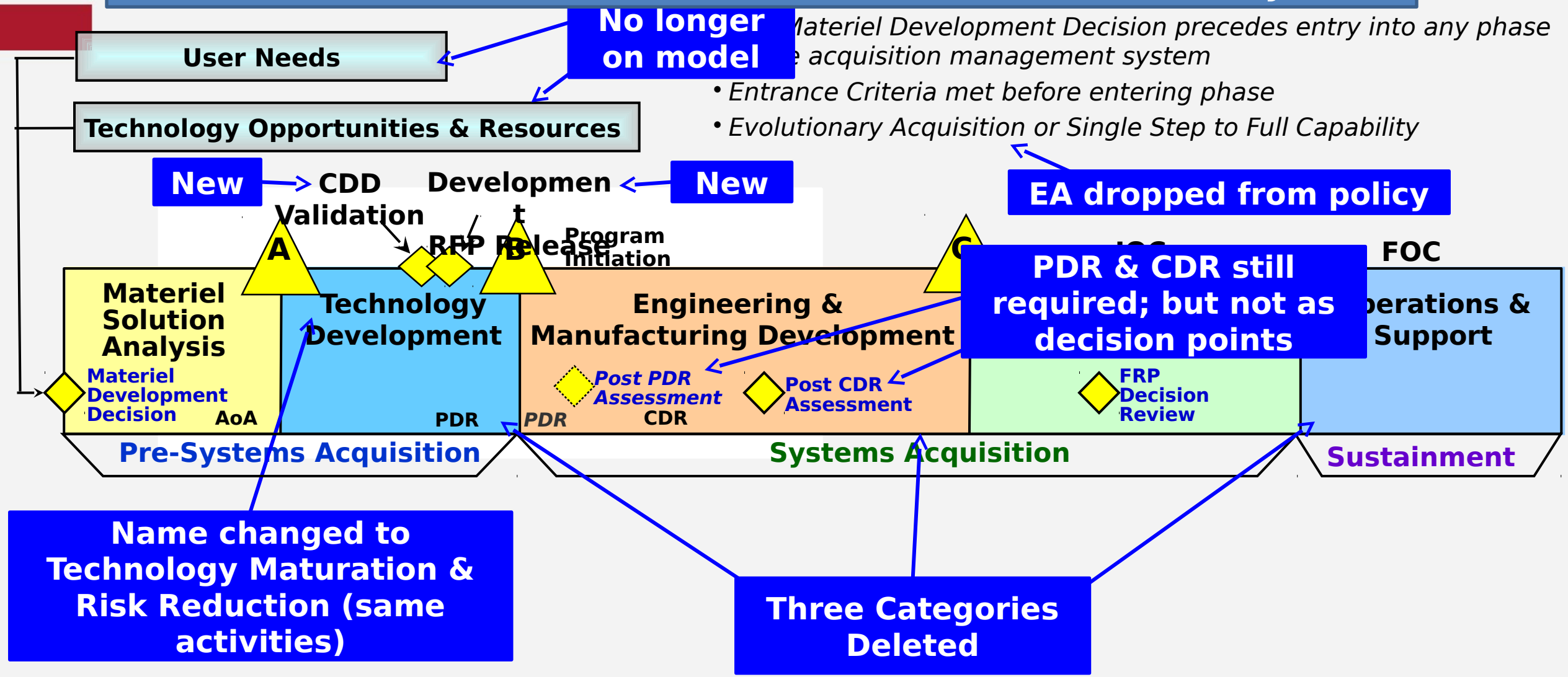
Date: June 8, 2015

Presented by: Thomas Fritz

Lesson Objective

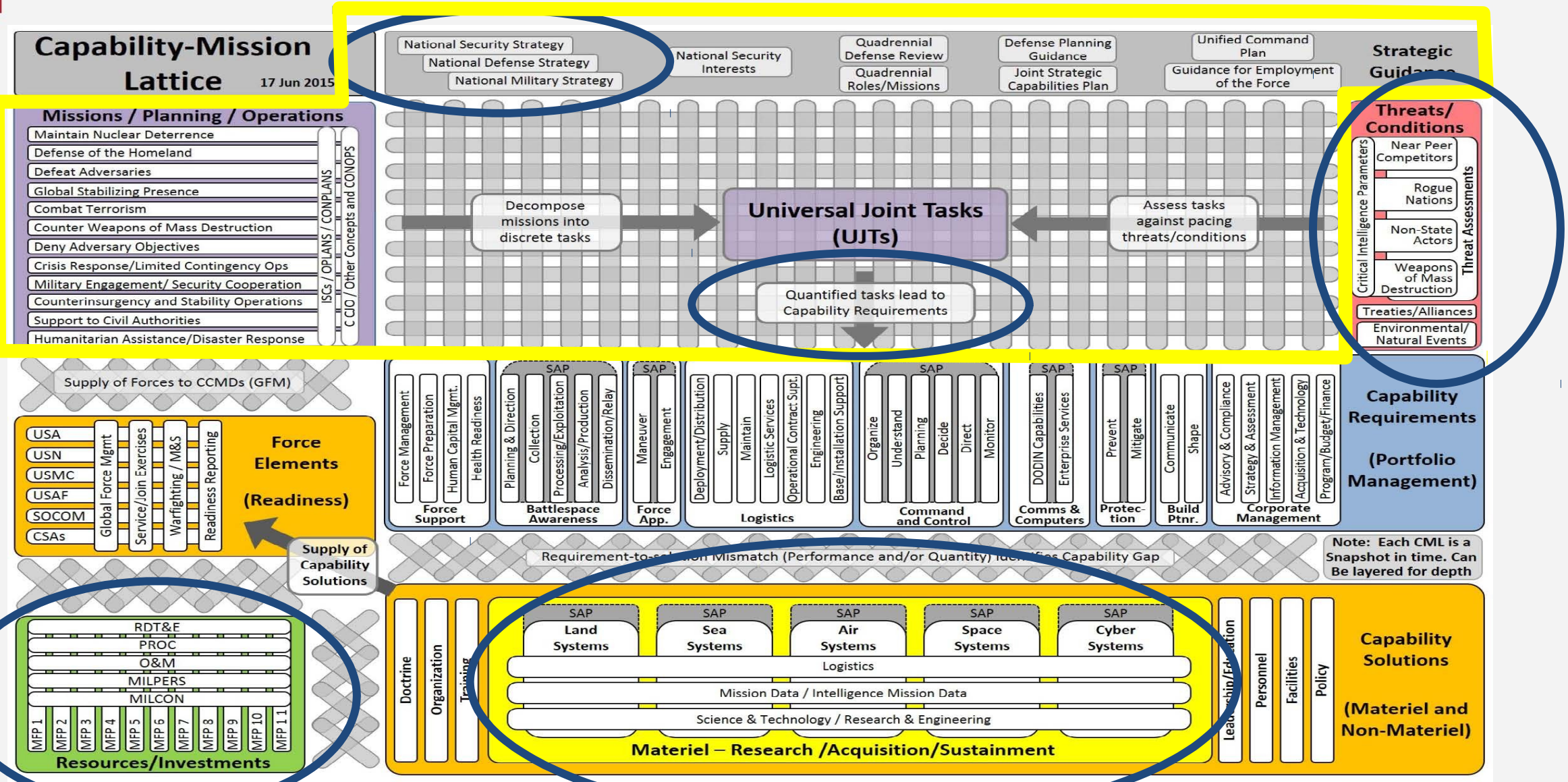
- Summarize the relationship between the Joint Capabilities Integration and Development System (JCIDS) and the Defense Acquisition System (DAS).
  - **Highlight recent changes to the DAS**
  - **Link JCIDS to Milestones and Phases of the DAS**
  - **Emphasize current strategic guidance**
  - **Highlight Better Buying Power Initiatives Related to Capability Requirements**

Changes – 2008 Defense Acquisition Management System

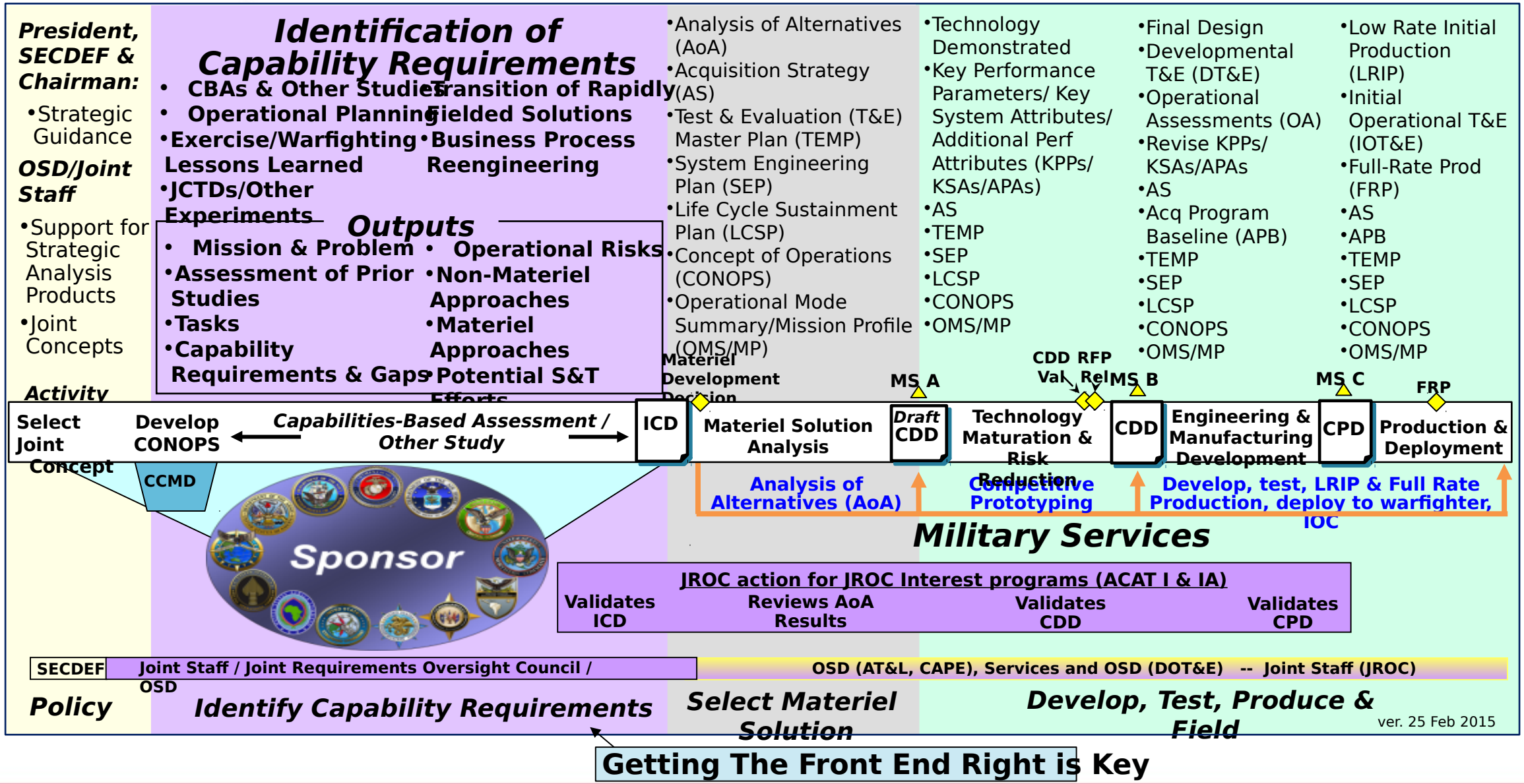


- No longer called “Defense Acquisition Management System (DAMS)”, or “Defense Acquisition Management Framework”.
- Now referred to as the “Defense Acquisition System (DAS)” and “Program Models”

Capability Mission Lattice
Figure B-2, Jcids manual 17 Jun 2015

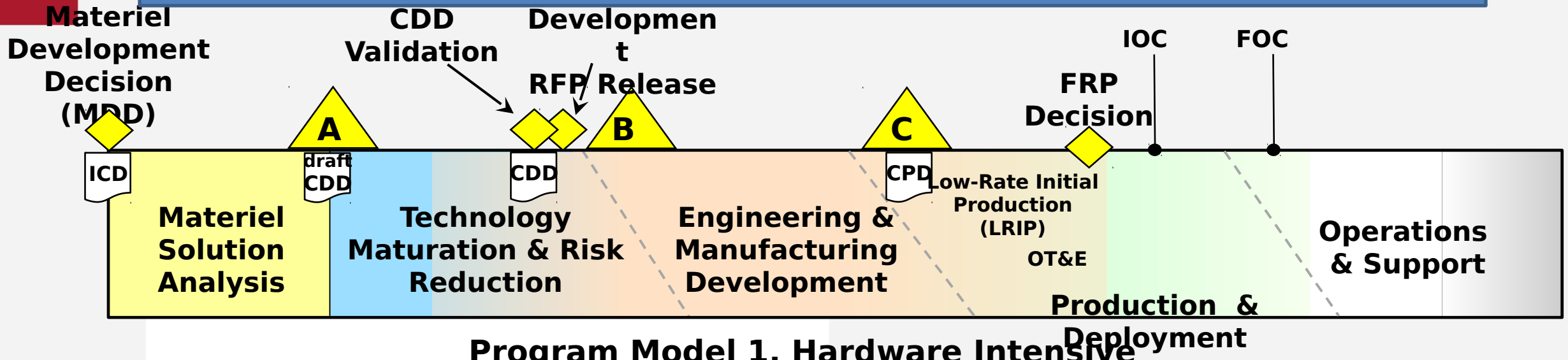


JCIDS and Acquisition



Getting The Front End Right is Key

Defense Acquisition System
DoDI 5000.02, January 7, 2015



Program Model 1, Hardware Intensive Program

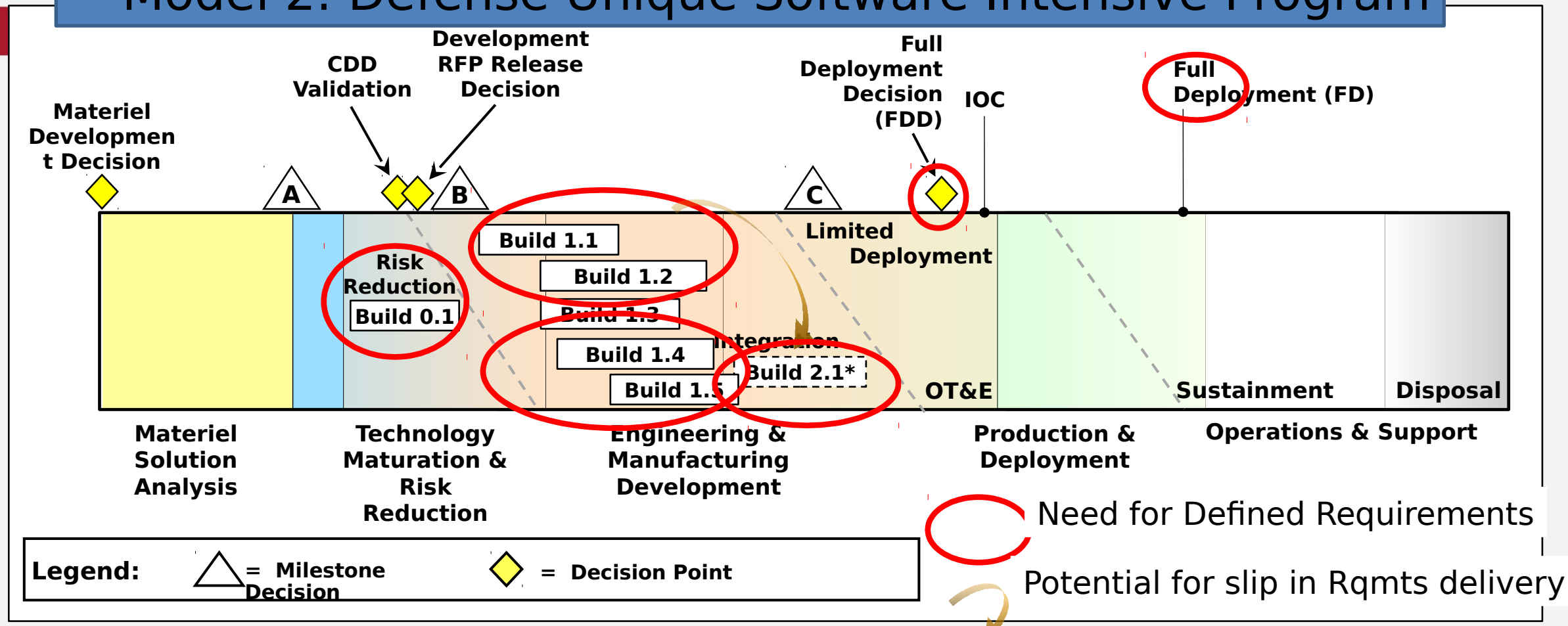
- **5 Phases**
- **3 Milestone Decisions – A, B, C**
- **4 Other Decision Points:**
  - **Materiel Development Decision (MDD)**
  - **Capability Development Document (CDD) Validation Decision Development RFP Release Decision**
  - **Full-Rate Production (FRP) Decision**
- **"Mandatory" Entry at Materiel Development Decision (MDD)**

• CPD: Capability Production Document

• IOC: Initial Operational Capability

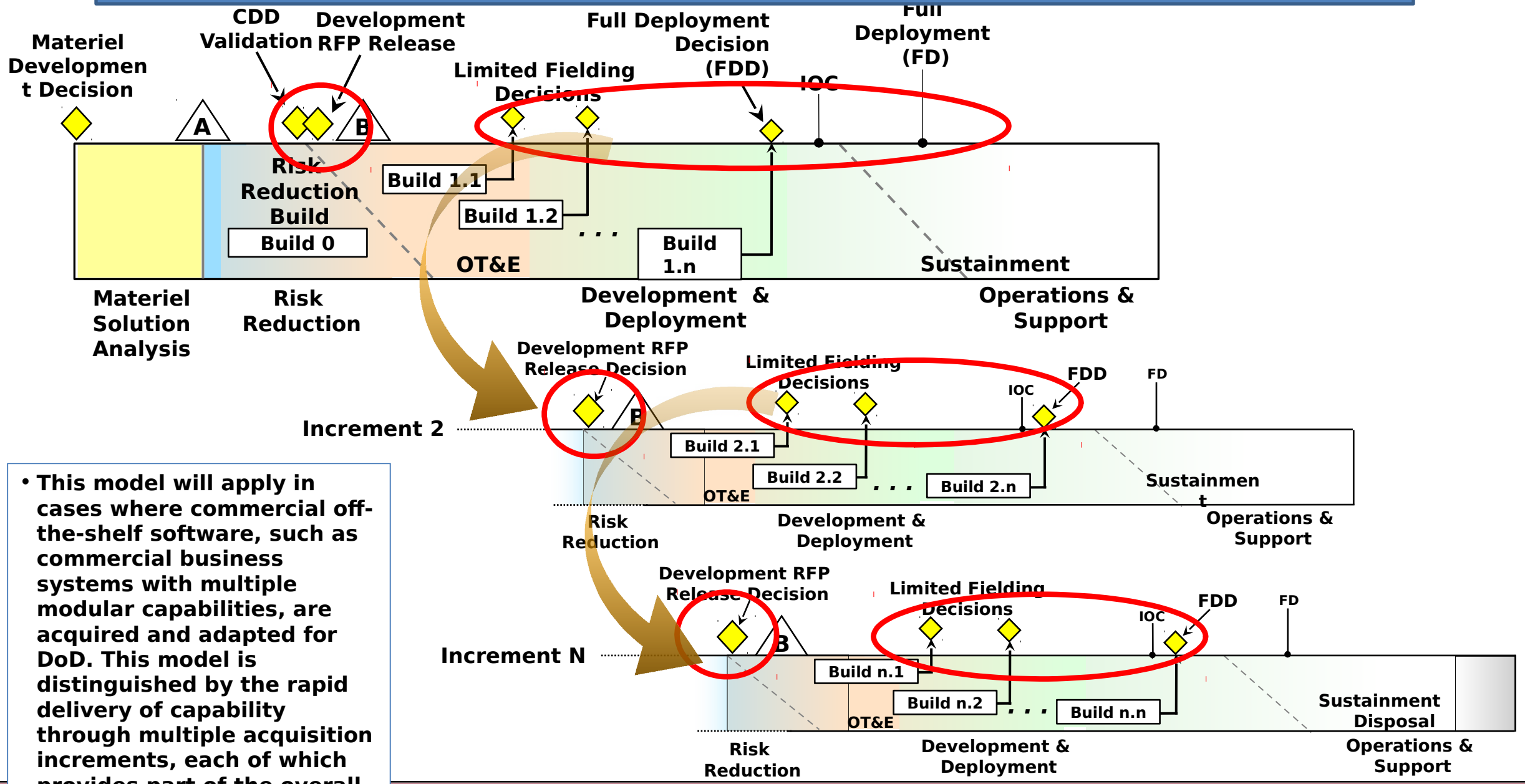
- **Examples of Model 1: Major Weapons Platform**
  - **This may be considered the classic model but with large software components in most programs program managers are now likely to use a hybrid model . (Hybrid A - chart 8)**
- **Program models are starting points from which to tailor an acquisition program**
- **Tailored program models reflect the type of program and the PM’s acquisition strategy, however, the responsibilities of the RM are essentially the same regardless of model.**

Model 2: Defense Unique Software Intensive Program



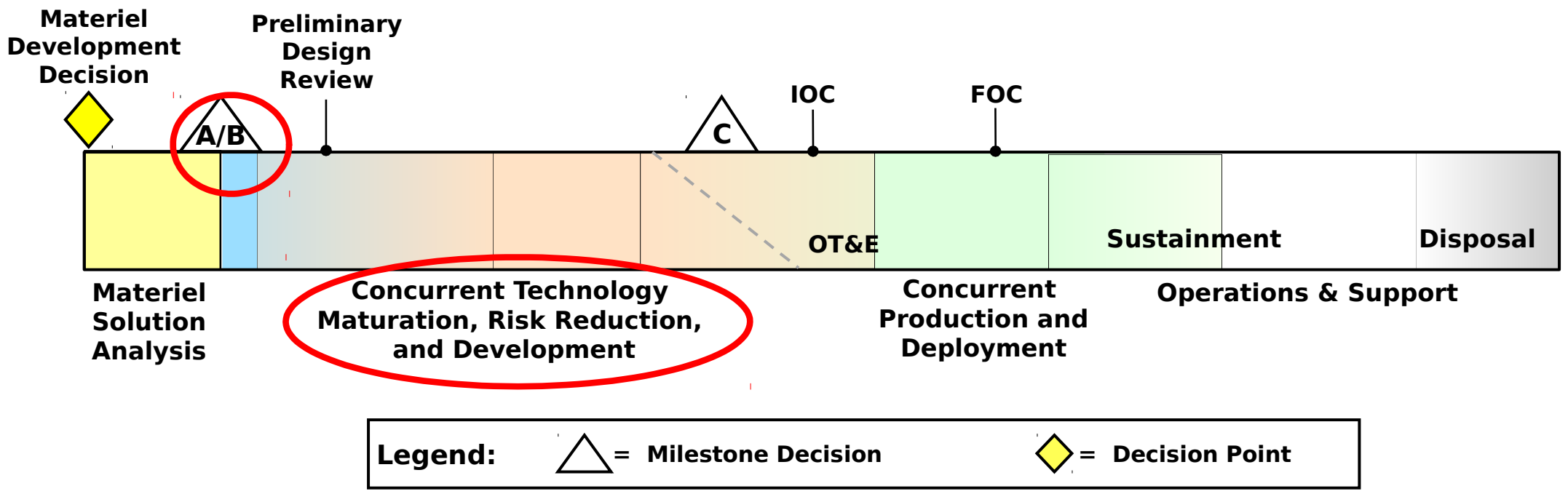
- Complex, usually defense unique, software program that will not be fully deployed until several software builds have been completed.
- Examples: command and control systems and significant upgrades to the combat systems found on major weapons systems such as surface combatants and tactical aircraft.
- Several software builds are typically necessary to achieve a deployable capability

Model 3: Incrementally Fielded Software Intensive Program



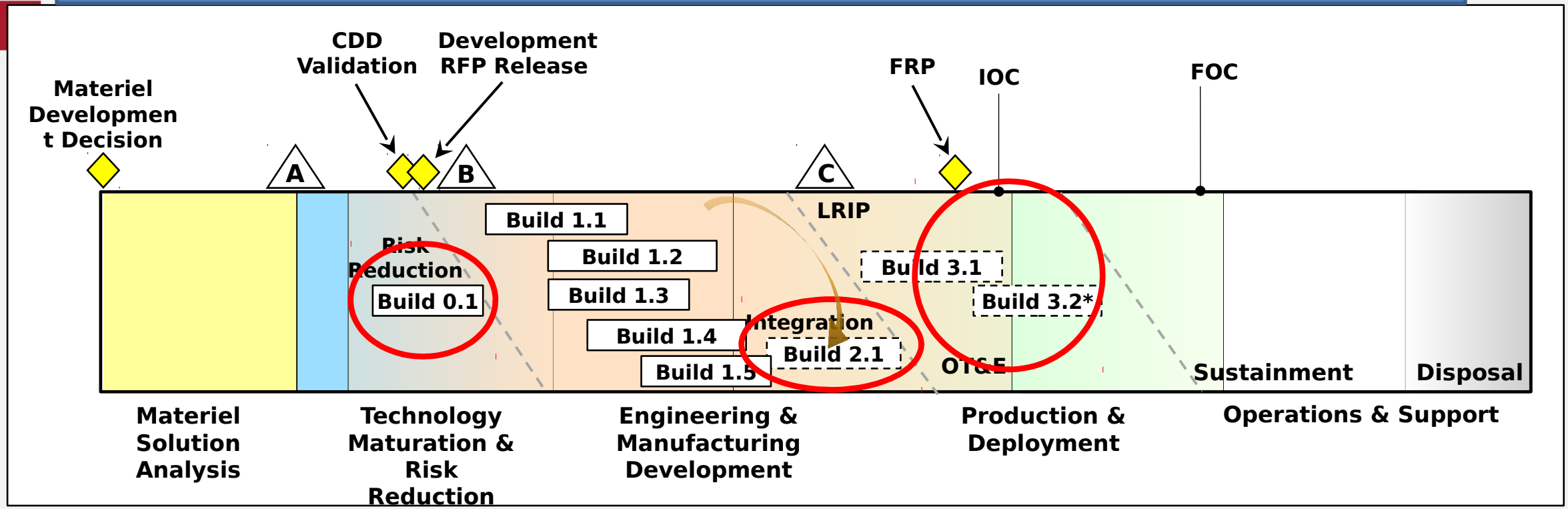
- This model will apply in cases where commercial off-the-shelf software, such as commercial business systems with multiple modular capabilities, are acquired and adapted for DoD. This model is distinguished by the rapid delivery of capability through multiple acquisition increments, each of which provides part of the overall

Model 4: Accelerated Acquisition Program



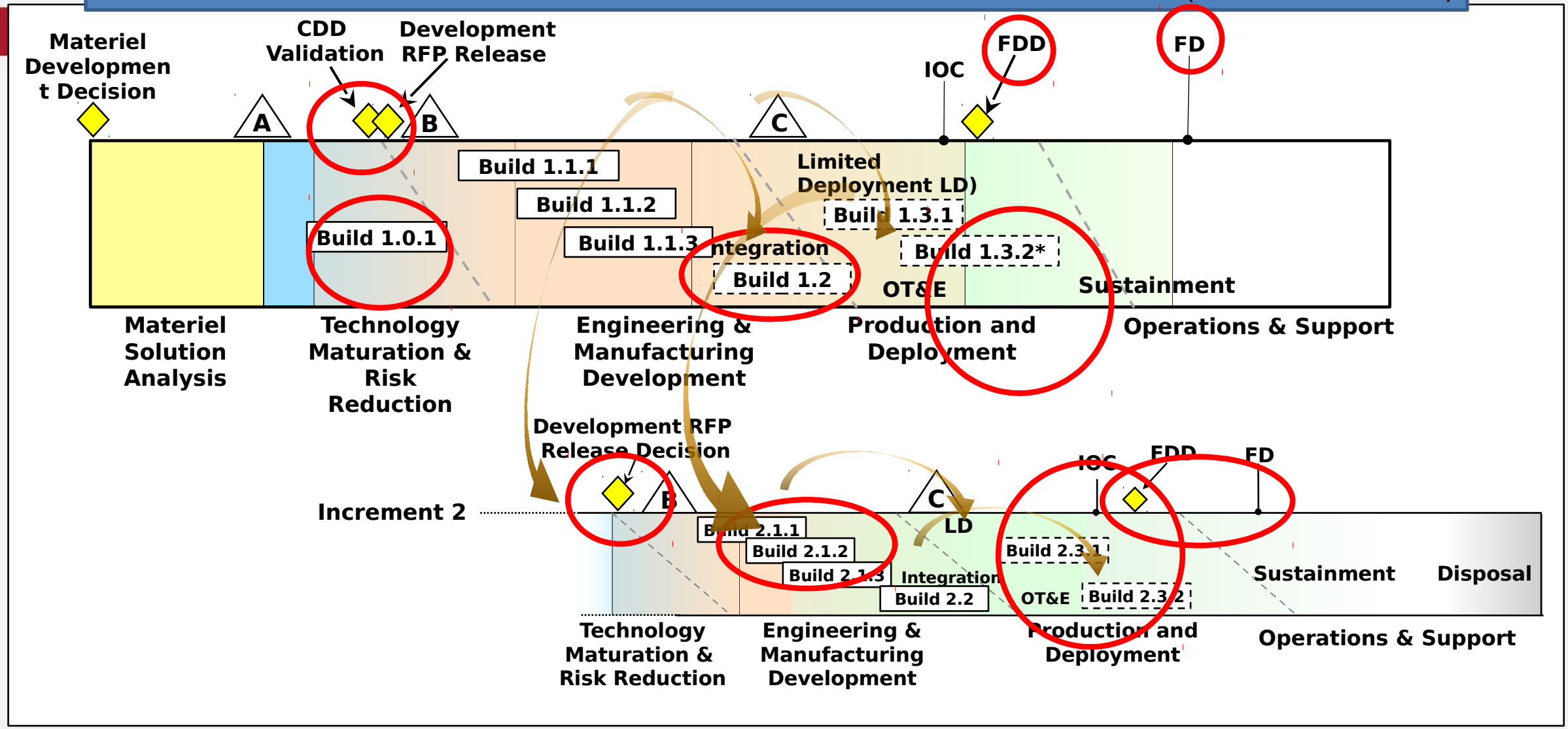
- Applies when schedule considerations dominate over cost and technical risk considerations.
- Compresses or eliminates phases of the process and accepts the potential for inefficiencies in order to achieve a deployed capability on a compressed schedule.
- Used when technological surprise by a potential adversary necessitates a higher-risk acquisition program.
- Shows one example of tailoring for accelerated acquisition and many others are possible.

Model 5, Hybrid Program A (Hardware Dominant)



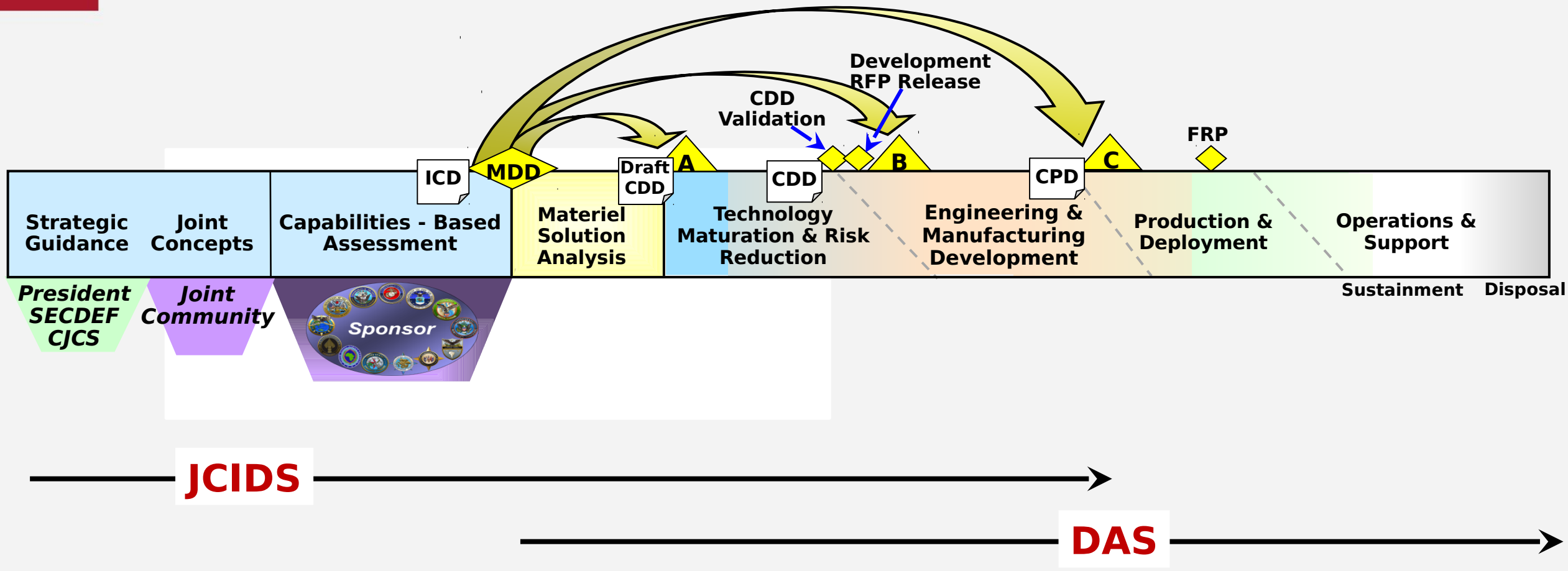
- Combines hardware development as the basic structure with software intensive development that is occurring simultaneously with the hardware development program.
- In hardware intensive development, the design, fabrication, and testing of physical prototypes may determine overall schedule, decision points, and milestones, but software development will often dictate the pace of program execution and must be tightly integrated and coordinated with hardware development decision points.

Model 6. Hybrid Program B (Software Dominant)



Depicts how a software intensive product development can include a mix of incrementally fielded software products or releases that include intermediate software builds.

Joint Capabilities Integration and Development System (JCIDS) / Defense Acquisition System (DAS)



- CDD: Capability Development Document
- CPD: Capability Production Document
- FRP: Full-Rate Production

- ICD: Initial Capabilities Document
- MDD: Materiel Development Decision
- RFP: Request for Proposal

Current National Strategies

- **National Security Strategy , (link to Fact Sheet)**
  - **Feb 2015, President Barack Obama. *Strong and sustainable American leadership; Maintain national defense ; End the draconian cuts***
- **National Defense Strategy**
  - **March 2014, QDR 2014, Builds on NDS 2012 with a broader strategic framework**
- **National Military Strategy (NMS)**
  - **June 2015, The National Military Strategy (link to News Release)**

"Congress may wish to consider whether the 2015 NSS qualifies as a true strategy in terms of linking ends to means and ways, as well as in terms of establishing priorities among goals."

Congressional Research Service Report #R44023. The 2015 National Security Strategy: Authorities, Changes, Issues for Congress Nathan J. Lucas, Section Research Manager July 2, 2015

QDR 2014 – Defense Strategy

The 2014 QDR embodies the 21st century defense priorities outlined in the 2012 Defense Strategic Guidance.

The Department's defense strategy emphasizes three pillars:

- *Protect the homeland*, to deter and defeat attacks on the United States and to support civil authorities in mitigating the effects of potential attacks and natural disasters.
- *Build security globally*, in order to preserve regional stability, deter adversaries, support allies and partners, and cooperate with others to address common security challenges.
- *Project power and win decisively*, to defeat aggression, disrupt and destroy terrorist networks, and provide humanitarian assistance and disaster relief.

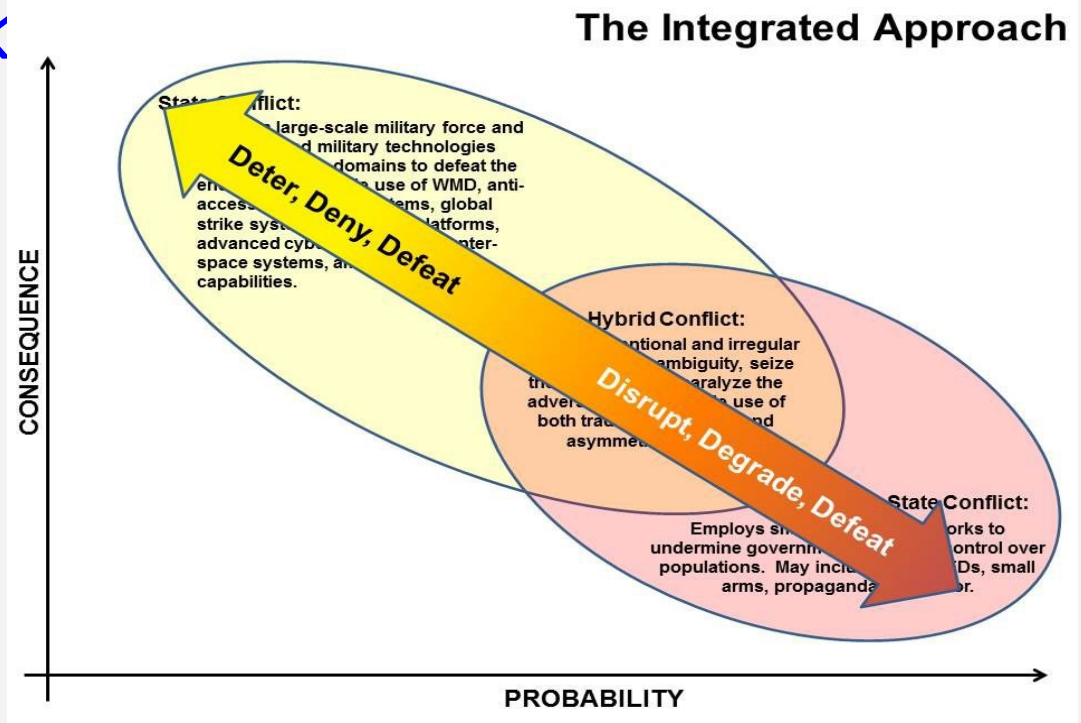
See student reference folder for more information on QDR 2014

NMs 2015 - National Military Objectives

- *Deter, deny, and defeat state adversaries*
- *Disrupt, degrade, and defeat violent extremist organizations*
- *Strengthen our global network*

JOINT FORCE PRIORITIZED MISSIONS

- Maintain a secure and effective nuclear deterrent
- Provide for military defense of the homeland
- Defeat an adversary
- Provide a global, stabilizing presence
- Combat terrorism
- Counter weapons of mass destruction
- Deny an adversary's objectives
- Respond to crisis and conduct limited contingency operations
- Conduct military engagement and security cooperation
- Conduct stability and counterinsurgency operations
- Provide support to civil authorities



BBP Guidance Roadmap	BBP 2.0 Focus Areas	BBP 3.0 Focus Areas
Target Affordability and Control Cost Growth	Achieve Affordable Programs	Achieve Affordable Programs
	Control Costs Throughout the Product Lifecycle	Achieve Dominant Capabilities While Controlling Lifecycle Costs
Incentivize Productivity & Innovation in Industry	Incentivize Productivity and Innovation in Industry and Government	Incentivize Productivity in Industry and Government
		Incentivize Innovation in Industry and Government
Reduce Non-Productive Processes and Bureaucracy	Eliminate Unproductive Processes and Bureaucracy	Eliminate Unproductive Processes and Bureaucracy
Promote Real Competition	Promote Effective Competition	Promote Effective Competition
Improve Tradecraft in Services Acquisition	Improve Tradecraft in Acquisition of Services	Improve Tradecraft in Acquisition of Services
	Improve the Professionalism of the Total Acquisition Workforce	Improve the Professionalism of the Total Acquisition Workforce

July-August 2015 – Special Issue

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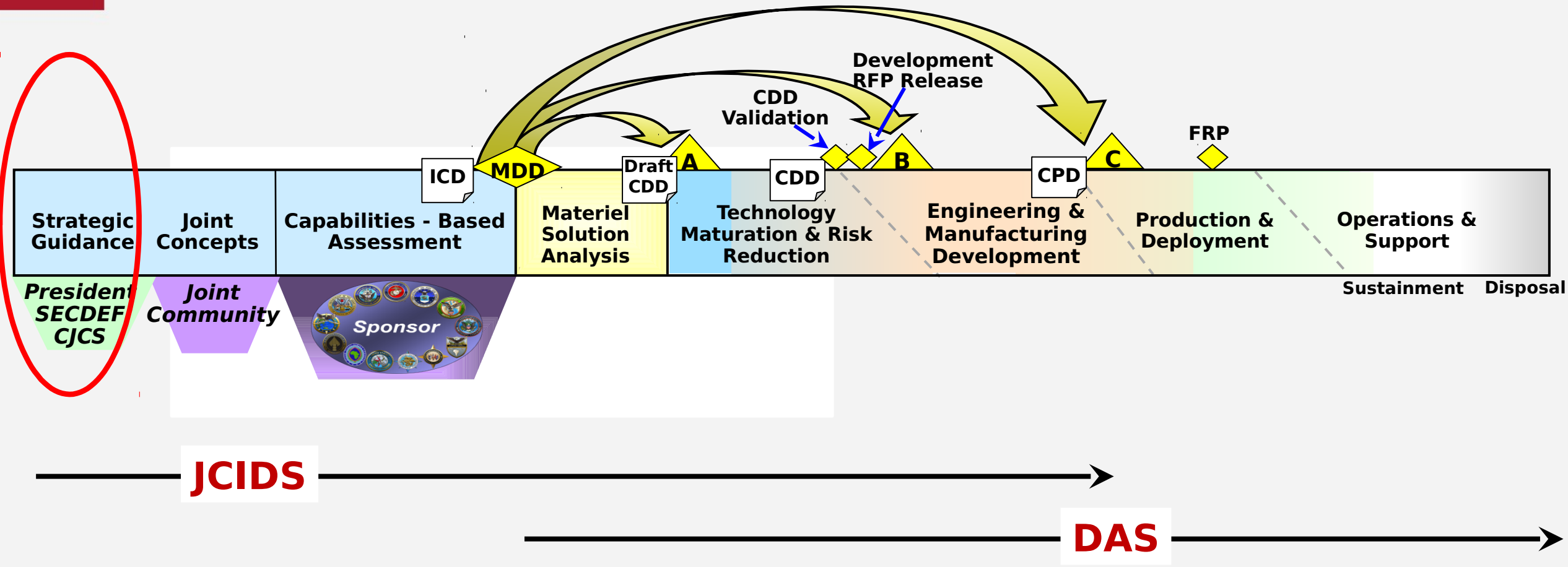
Getting the Requirements Right

Better Buying Power (BBP) Impact on Requirements Management

- **Achieve Affordable Programs.**
  - **Mandate affordability as a requirement – *require Milestone Decision Authority (MDA)relief to exceed affordability caps – similar to requiring requirements validation authority relief to exceed KPP thresholds***
- **Achieve Dominant Capabilities While Controlling Lifecycle costs**
  - **Implement should-cost management – *may free-up funds to buy more warfighting capability***
  - **Build stronger relationships with the requirements community to control costs**
  - **New in 3.0 - Institutionalize stronger DoD level Long Range R&D Program Plans**

See student reference folder for more information on BBP

Joint Capabilities Integration and Development System (JCIDS) / Defense Acquisition System (DAS)



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Resources

BBP 3.0	http://bbp.dau.mil	
NSS	http://www.whitehouse.gov/sites/default/files/docs/2015_national_security_strategy.pdf	
QDR	http://www.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf	
Joint Electronic Library + JDEIS	CAC enabled https://jdeis.js.mil/jdeis/index.jsp	
JCIDS	CAC enabled https://intellipedia.intelink.gov/wiki/JCIDS	
DoD 5000.02	http://www.dtic.mil/whs/directives/corres/pdf/500002p.pdf	
Generic Acquisition Process (Pre-Tailoring) Acquisition Decision Points and Phases	Acquisition Waterfall Chart with color enhancements 17 Dec final (3).pdf	
Congressional Research Service: Reports on National Strategies	http://www.fas.org/sgp/crs/natsec/R44023.pdf https://fas.org/sgp/crs/natsec/IN10333.pdf http://www.fas.org/sgp/crs/natsec/R43403.pdf http://www.fas.org/sgp/crs/natsec/R43174.pdf	

Strategic Guidance – Joint Concepts – JCIDS – Acquisition

National Security Strategy
National Defense Strategy
National Military Strategy
Unified Command Plan
Defense Planning Guidance
Quadrennial Defense Review

Capstone Concept for Joint Operations (CCJO)
Chairman's vision for how Joint Force will defend the nation

Joint Operating Concepts (JOCs)
Link strategic guidance to future military operations

Supporting Concepts
Depth and detail to single & multiple JOCs

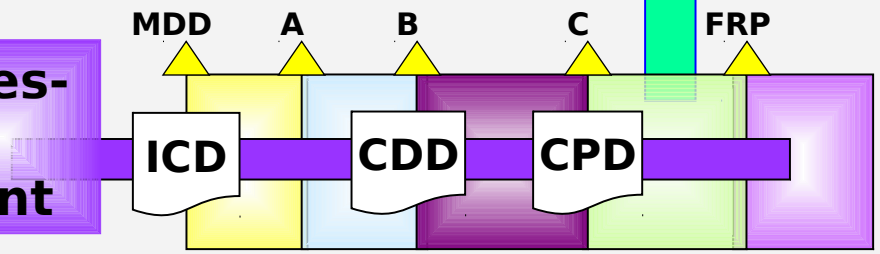
Family of Joint Concepts

Service concepts, multiservice concepts, &

Current Joint Warfighting Capabilities

Future Joint Warfighting Capabilities

Capabilities-Based Assessment



JCIDS ***Acquisition***

Affordability
JCAs
Cost
Intelligence
Threat

www.DAU.mil

RQM 310:
Pre-MDD Analysis

Defense Acquisition University

Certification Training

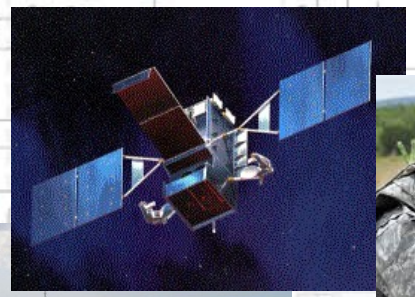
Jack Mohney
Professor, Requirements Management
Defense Systems Management College
Defense Acquisition University
jack.mohney@dau.mil
(703) 805-4369

July 20, 2015

Lesson Objectives

- Examine analytical approaches that identify military capabilities, capability gaps, recommend non-materiel & materiel approaches, & recommend action
  - Examine military capability analytical approaches
  - Summarize the essential characteristics & qualities of Capability Based Assessments (CBAs)
  - Explore the relationship these approaches have to the DOTmLPF-P Change Recommendation (DCR) & Initial Capabilities Document (ICD)

The Environment (Why Capability Analysis Matters...)



Our National Challenge

- The United States must:
  - Prevail in current conflicts – and also:
  - Deter potential adversaries – yet continue to:
  - Prepare for future conflict – and:
  - Cooperate with allies and partners

- U.S. Armed Forces must:
  - Address a wide range of challenges yet:
  - Recognize not all challenges have equal priority

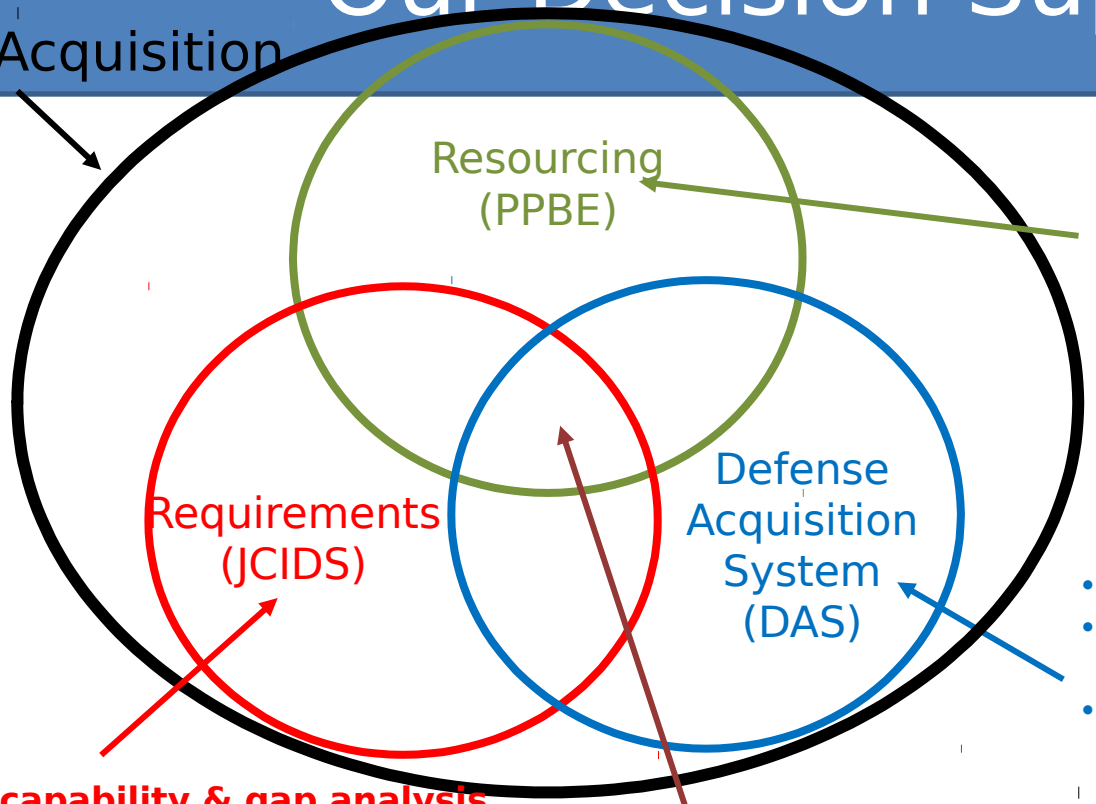
- The DoD Must:
  - Make difficult tradeoffs to manage risk in
  - Short-, Mid-, and Long-Term time frames but:

Our Military Challenge

CCM Responsibilities (Today)	Investment (Tomorrow)
Joint Systems	Service Missions
Changing Demands & Proactive Action	Shrinking Budgets & Unstable Funding
Geographic Specificity	Worldwide Applicability
Ambitious Mission Sets & Evolving Enemies	Achievable Acquisitions & Long-Lasting Systems
High Quantity (Sufficiency)	High Quality (Capability)

CCMD: Combatant Command

Our Decision Support Challenge



- Unstable funding
- Insufficient resourcing & trade space
- Poorly-phased budget unable to support materiel development

- Immature technologies
- Incomplete systems engineering
- Little requirements traceability and rushed decomposition
- Little-to-no schedule trade space
- Inadequate testing – not enough time and assets

- Poor capability & gap analysis
- Poorly-written JCIDS documents (ICD, CDD, CPD, DCR)
- Top-down materiel solutions
- Single point failures: critical dependence on programs with acquisition problems

- Non-existent inter- and intra-departmental stakeholder coordination and support

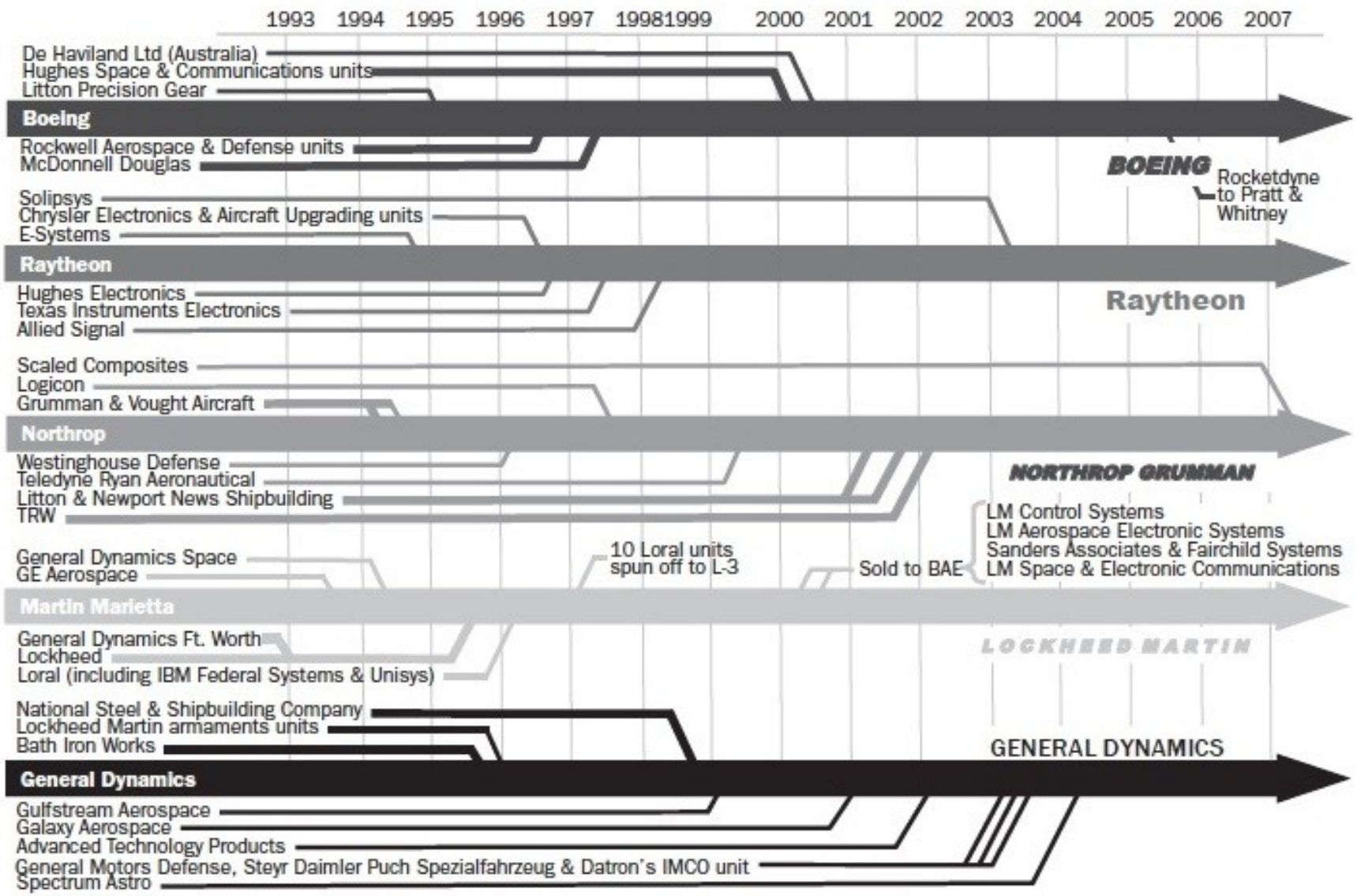
Synchronize JCIDS, DAS, and PPBE to deliver capabilities to Warfighters

CDD: Capability Development Document
CPD: Capability Production Document

DCR: DOTmLPF-P Change Recommendation
ICD: Initial Capabilities Document

Our Sourcing Challenge

Top-Tier U.S. Defense Industrial Consolidation, 1993-2007

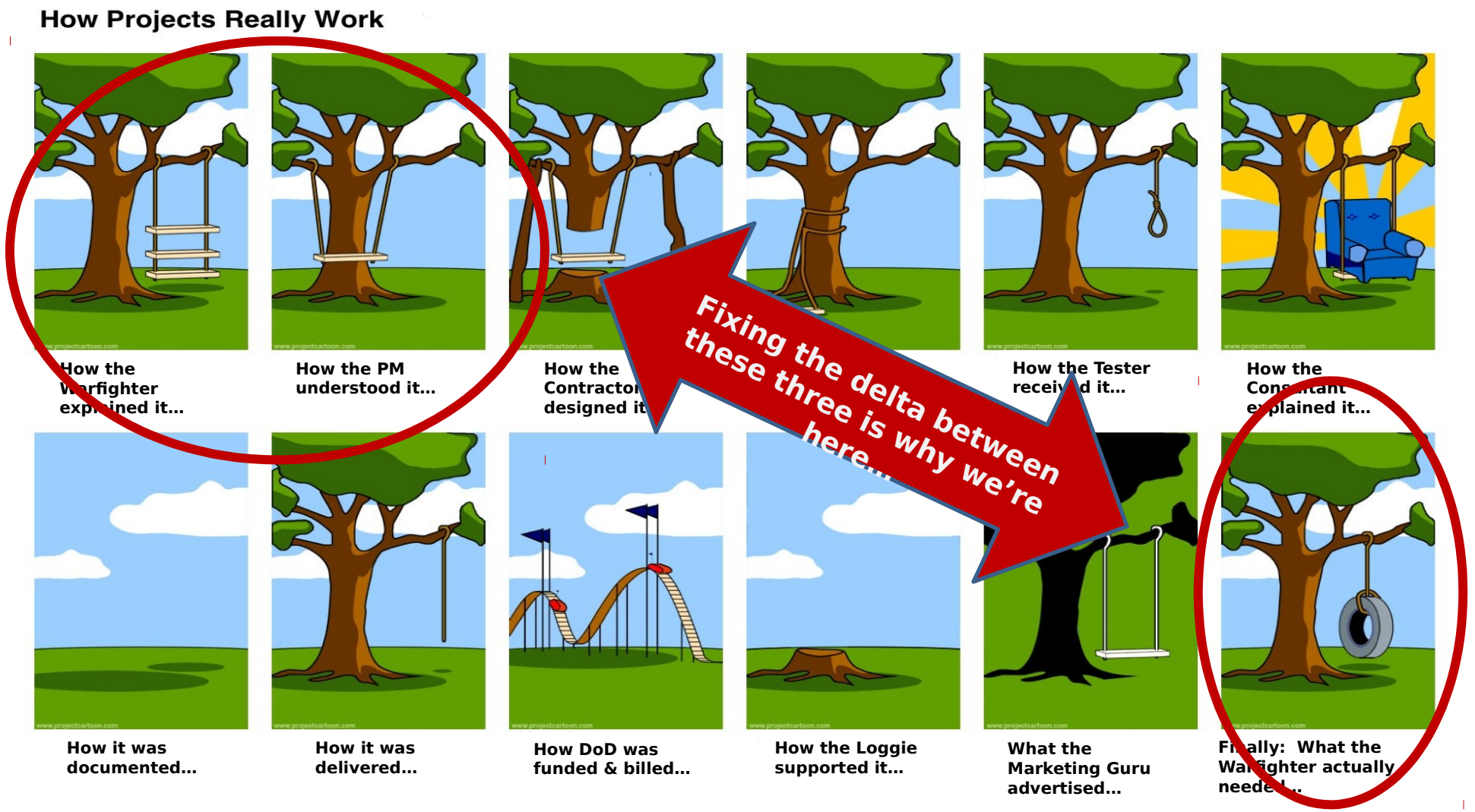


Source: Globalsecurity.org, accessed Jan 22, 2014

Our Requirements Challenge

- Gaming the system:
  - Specifying the solution too early
  - Misusing the Urgent/Emergent processes
- Miscommunicating real warfighter needs:
  - Untrained workforces conducting inadequate capability analyses
  - Faulty translation, documentation, and traceability of capabilities & gaps into usable, observable, & testable requirements
  - “Good” leadership briefings that mask “Bad” JCIDS documents
- Hindering acquisition programs:
  - Cost & schedule estimates derived from those very JCIDS documents
  - Confusing a “requirement” with a “specification”
  - Requirements creep - operational & technical
  - No follow-up on DAS reviews and T&E results

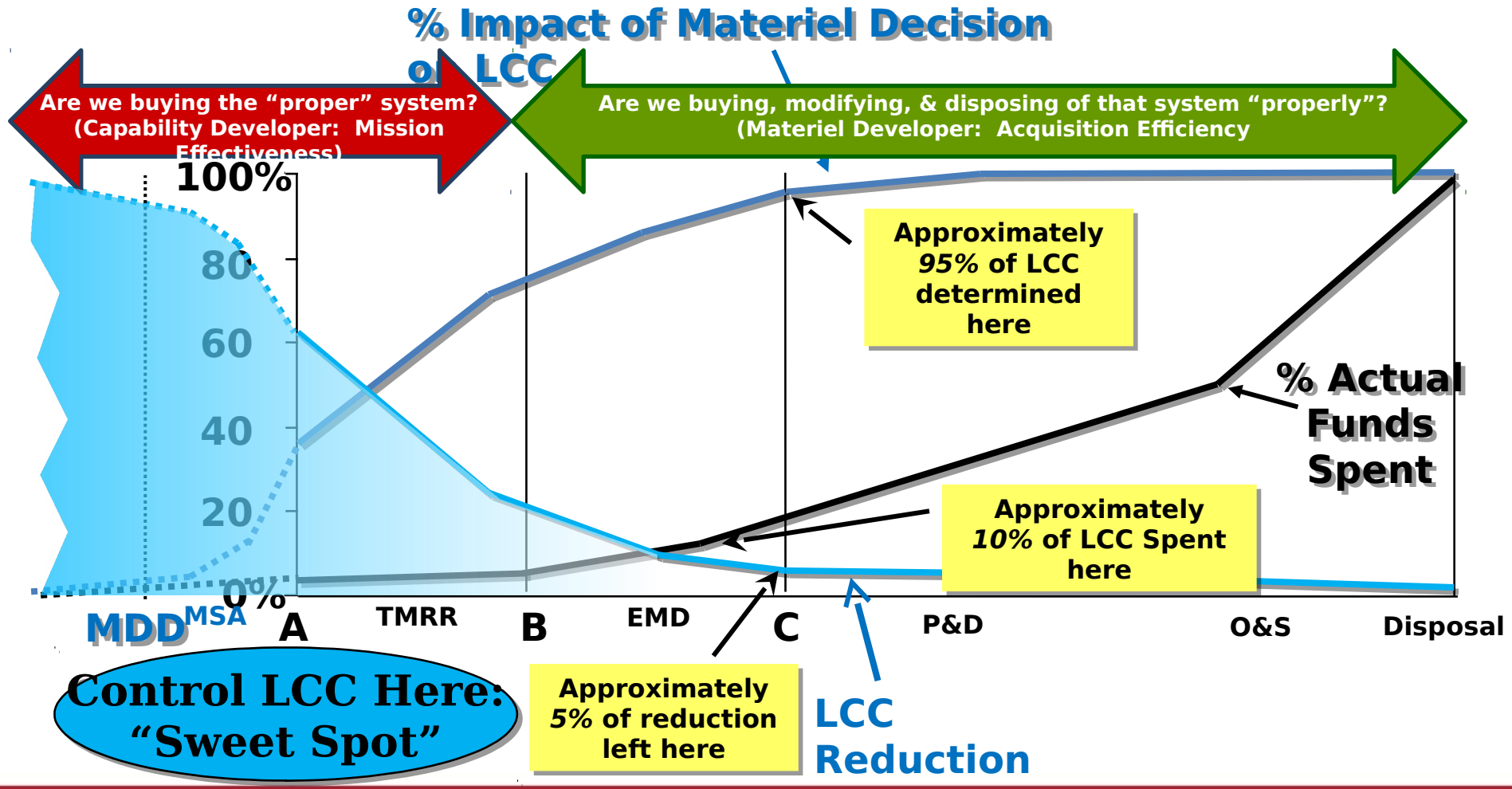
The Consequence


How Projects Really Work
How the Warfighter explained it…
How the PM understood it…
How the Contractor designed it…
How the Tester received it…
How the Consultant explained it…
Fixing the delta between these three is why we're here…
How it was documented…
How it was delivered…
How DoD was funded & billed…
How the Loggie supported it…
What the Marketing Guru advertised…
Finally: What the Warfighter actually needed…

http://www.businessinnovationinsider.com/2006/02/what_the_customer_really_needed.php
Accessed Sep 14, 2013

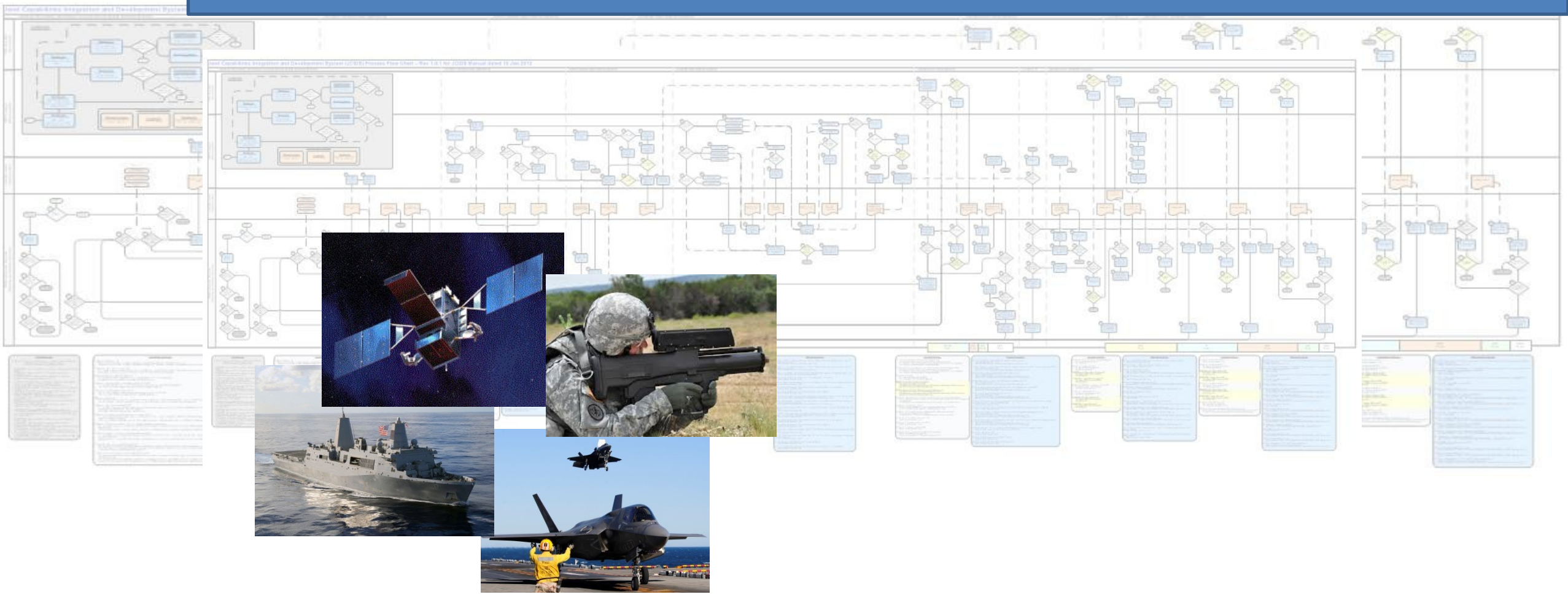
Why Care About Up-Front Capability Analyses?

Life Cycle Cost (LCC) Determination*

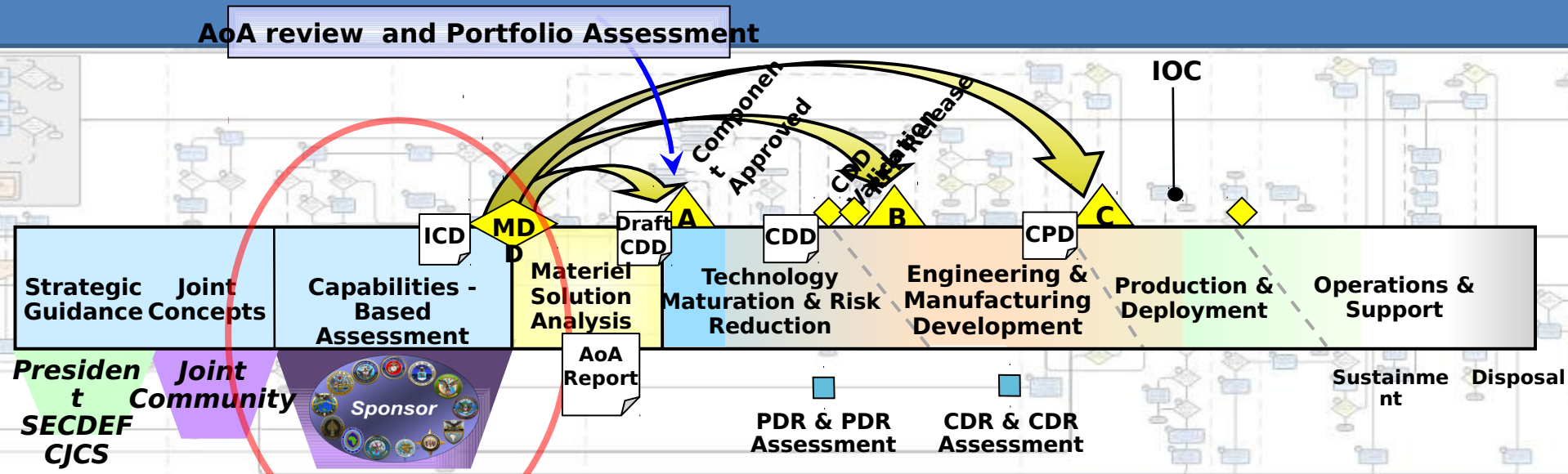


*Notional curves:
- **Solid**: averaged DAU, AFMC, & AMR Research Inc. data

The Process (Pre-MDD Capability Identification…)



Pre-MDD Analyses



AoA: Analysis of Alternatives
CDD: Capability Development Document

ICD: Initial Capabilities Document\
MDD: Materiel Development Decision

Solving Military Capability Gaps

- Basically, three paths:
  - 1. GFM: for assets available in Joint Force – basically adjusting what we currently have to where we need it…

OR

  - 2. DCR: When DoD needs an organic Joint Force non-materiel approach

  - 3. ICD: when DoD needs both a materiel & non-materiel approach

- Regard[illegible] d analysis increases the

DCR: DOTmLPF-P Change Recommendation
GFM: Global Force Management

ICD: Initial Capabilities Document

GFM: Title 10 U.S.C.: Force Deployment Authorities*

President, through the UCP, uments his direction for gning forces for Unified mands (Title 10 U.S.C.,

www.DAU.mil

- Allocation:

SecDef

forces assigned to a combatant command may be transferred or allocated to another combatant commander for employment... under procedures prescribed by the SecDef and approved by the President (Title 10 U.S.C., Section 162)

- Apportionment:

CJCS

The "Three A's" of Global Force Management

contingency planning guidance (Title 10 U.S.C., Section 153)

*Source: EUCOM GFM Briefing, 3 Mar 2012

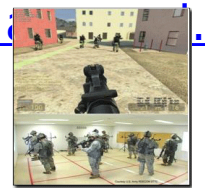
DoD Analytical Approaches to Identify Capabilities

- *CJCSI 3150.25, Joint Lessons Learned Program*
  - Reflects assessment of operational utility
  - May lead to further analyses (CBA trigger?) & development of JCIDS documents for staffing
  - http://www.dtic.mil/cjcs_directives/cdata/unlimit/3150_25.pdf

- *Joint IED Defeat Transition Package*
  - Source document for the CDD & CPD - JROC approval & transition to program of record (*POR*)

(IED robot with Tanglefoot)

- *JCTD – Joint Capability Technology Demonstration*
  - After an assessment of operational utility
  - Outlined in Emerging Capability and Prototyping (EC&P) website:
  - http://www.a[illegible].mil/ecp/



(FITE)

- *Prototypes*
  - After an assessment of operational utility
  - Used to addr[illegible]ONs & JEONs – also outlined in the EC&P website above:

(JLTV)

DoD Capability Analysis Outputs

- Regardless of the approach, these analyses ought to:
  - Describe the mission & military problem
  - Assess prior studies
  - ID the tasks needed to meet mission objectives
  - ID the capabilities using one or more JCAs - describe the tasks, conditions, standards
  - Assess the capability gaps – needed vs programmed force structure
  - Assess the operational risk for each capability gap if not addressed
  - First, exhaust all possible non-materiel approaches that could satisfy part of all of the capability gaps
  - Second, examine materiel approaches
  - Third, recommend the most appropriate approach to close the capability gaps and reduce operational risk

Fundamental goal: recommend action or accept risk

JCA: Joint Capability Area

The DoD CBA

- The Capabilities-Based Assessment (CBA) is the "typical" JCIDS method to identify capabilities, gaps, & possible solution approaches:
  - Recapitalization, Replacement, & IS: CBA takes No Longer Than 90 days (NOT including writing & staffing times…)
  - More complex or new mission area: CBA takes No Longer Than 180 days (again, no writing & staffing times…)
  - No extensive detail or pre-determined solution

CBA Overview

Initiated by:

DoD Sponsor

Based upon:

- Concepts
- Endorsed CONOPS
- Formally-tasked OPLANS and CONPLANs
- ISCs

CBA: Typical analytic basis of JCIDS

Becomes basis for:

Validating capability needs

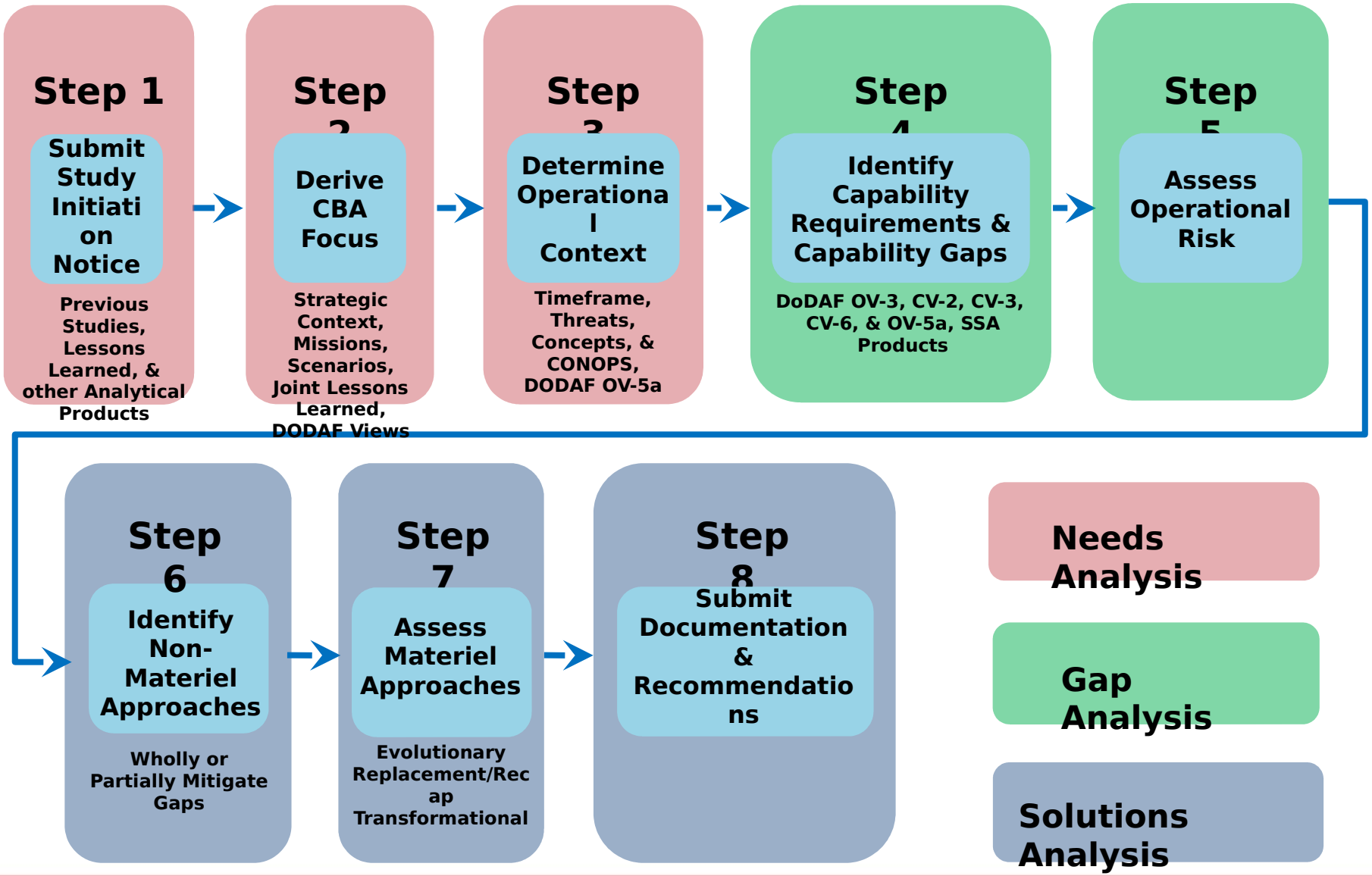
Recommends:

ACTION w/o excessive rigor

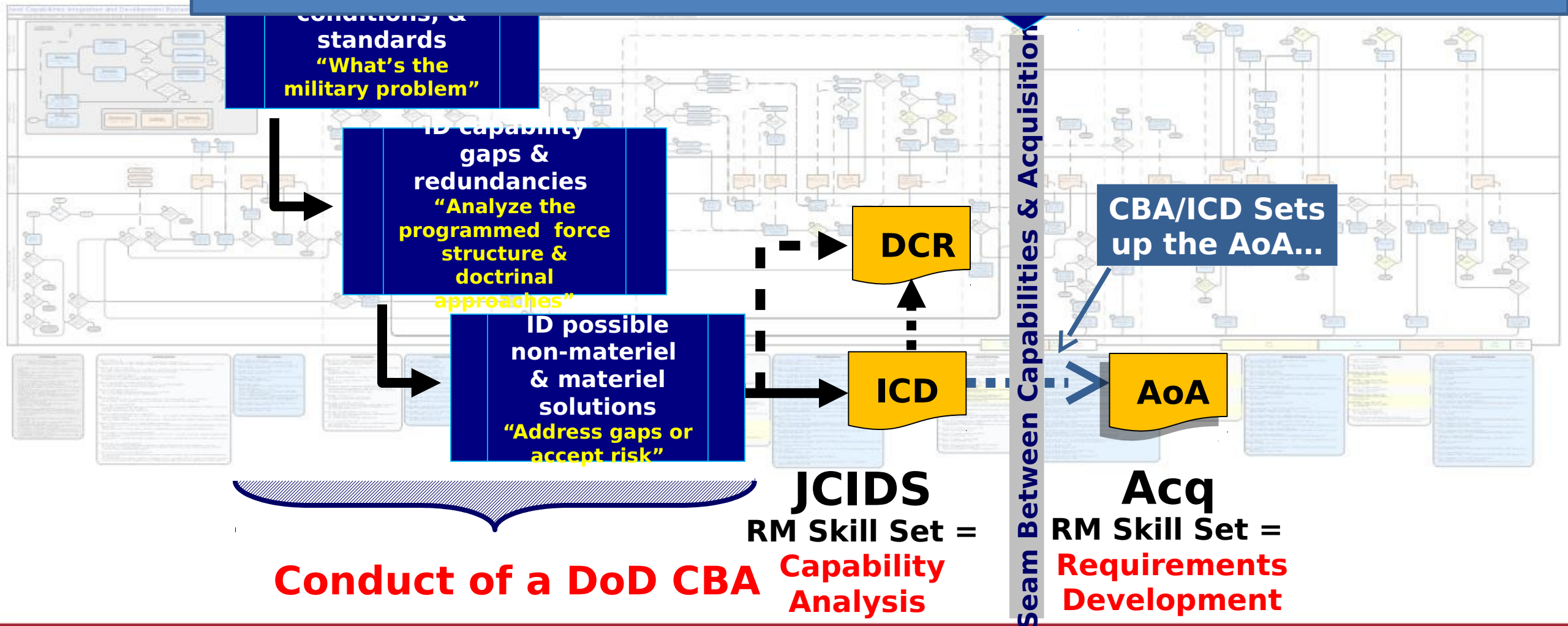
CONPLAN: Concept Plan
CONOPS: Concept of Operations

ISC: Integrated Security Constructs
OPLAN: Operation Plan

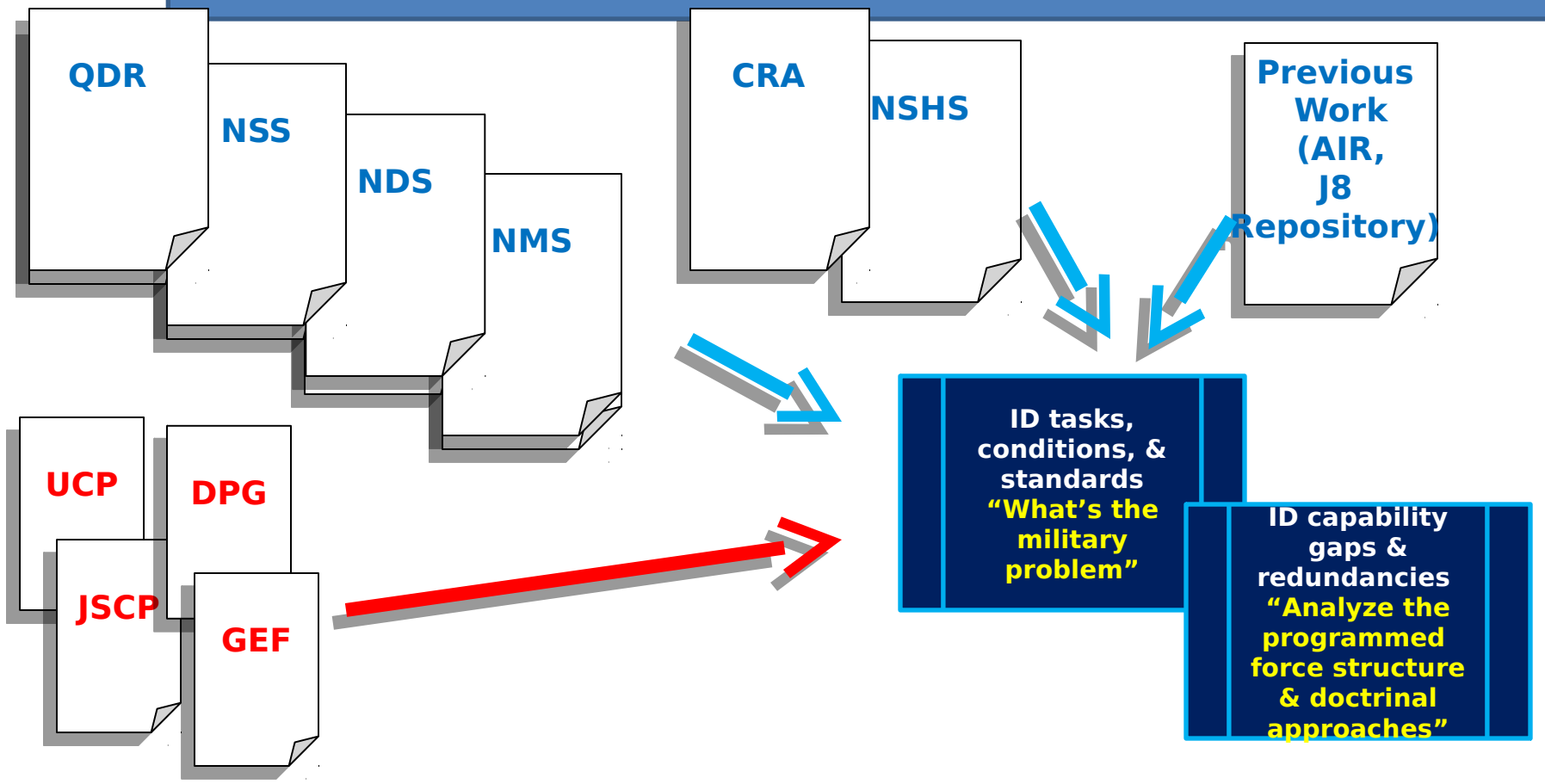
CBA Steps - May 2015 JCIDS Manual



CBA to AoA & RM Skill Sets



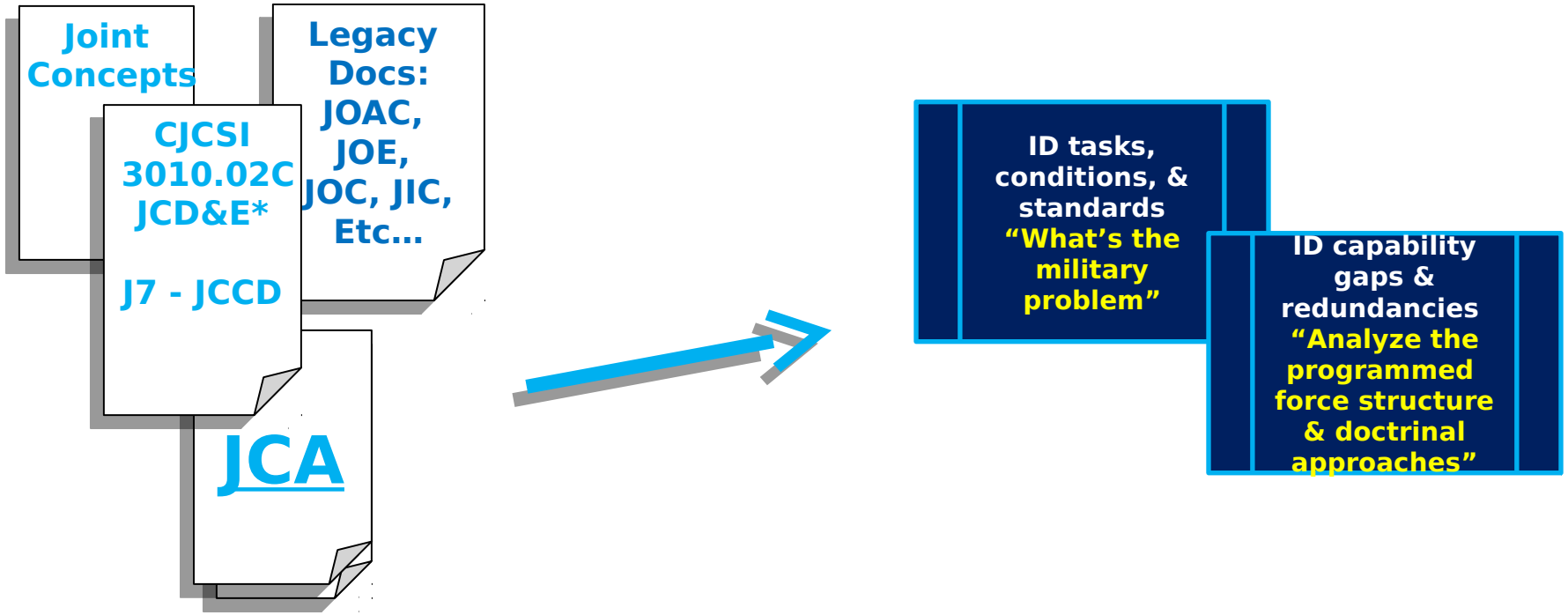
CBA Lit Search: Strategic Guidance



AIR: Acquisition Information Repository
CRA: Chairman's Risk Assessment
QDR: Quadrennial Defense Review
NSS: National Security Strategy
NDS: National Defense Strategy
NMS: National Military Strategy

NSHS: National Strategy for Homeland Security
UCP: Unified Command Plan
GEF: Guidance on Employment of the Force
DPG: Defense Planning Guidance
JSCP: Joint Strategic Capabilities Plan

CBA Lit Search: Conceptual Guidance

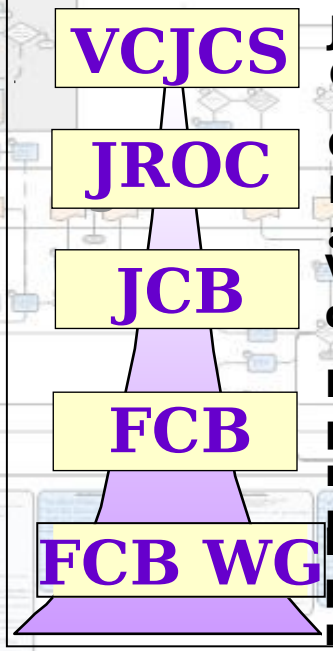

Joint Concepts
CJCSI 3010.02C JCD&E*
J7 - JCCD
Legacy Docs: JOAC, JOE, JOC, JIC, Etc…
JCA
ID tasks, conditions, & standards "What's the military problem"
ID capability gaps & redundancies "Analyze the programmed force structure & doctrinal approaches"

- J7 Joint Concepts website (JEL+, login requires CAC): **http://www.dtic.mil/doctrine/concepts/concepts.htm**

JCCD: Joint Capabilities to Concept Division
JCD&E: Joint Concept Development & Experimentation
CCJO: Capstone Concept for Joint Operations

JCA: Joint Capability Area
JOC: Joint Operating Concept
JOAC: Joint Operational Access Concept
JOE: Joint Operating Environment

Requirements Decision Chain



VCJCS — JROC Chairman; Advises the CJCS

JROC — Owns JCIDS; Validates JROC Interest documents; final authority

JCB — Validates JCB Interest documents; assists JROC

FCB — Reviews documents; prioritizes within portfolio; makes validation recommendation to JCB/JROC

FCB WG — Reviews documents & prioritizes prior to FCB review

Chair: VCJCS

Statutory Members:

- Vice Chief of Staff, Army
- Vice Chief of Naval Operations
- Vice Chief of Staff, Air Force
- Assistant Commandant of the Marine Corps
- Combatant Commands* (Commander or Deputy Commander)

- More Tank-like, limit the audience, help promote determinative discussions & decisions…
  - JROC Principals+1; CCMD Principals+1
  - Statutory Advisors: USD - AT&L, Policy, & Comptroller; DCAPE; DOT&E
  - JS J7; FCB Chair; & minimal others (invitation only…)

JROC: Joint Requirements Oversight Council
JCB: Joint Capabilities Board

FCB: Functional Capabilities Board
FCB WG: FCB Working Group

Functional Capability Boards

C4/Cyber
Includes NC and C2 JCAs
BGen Weatherington
JS J-6

Battlespace Awareness
Mr. Canfield
JS J-2

Logistics*
Mr. Hawkins
JS J-4

Force Support
MGen Thomas
JS J-8

Protection**
BGen Bobeck
JS J-8

Force Application
MGen Thomas
JS J-8

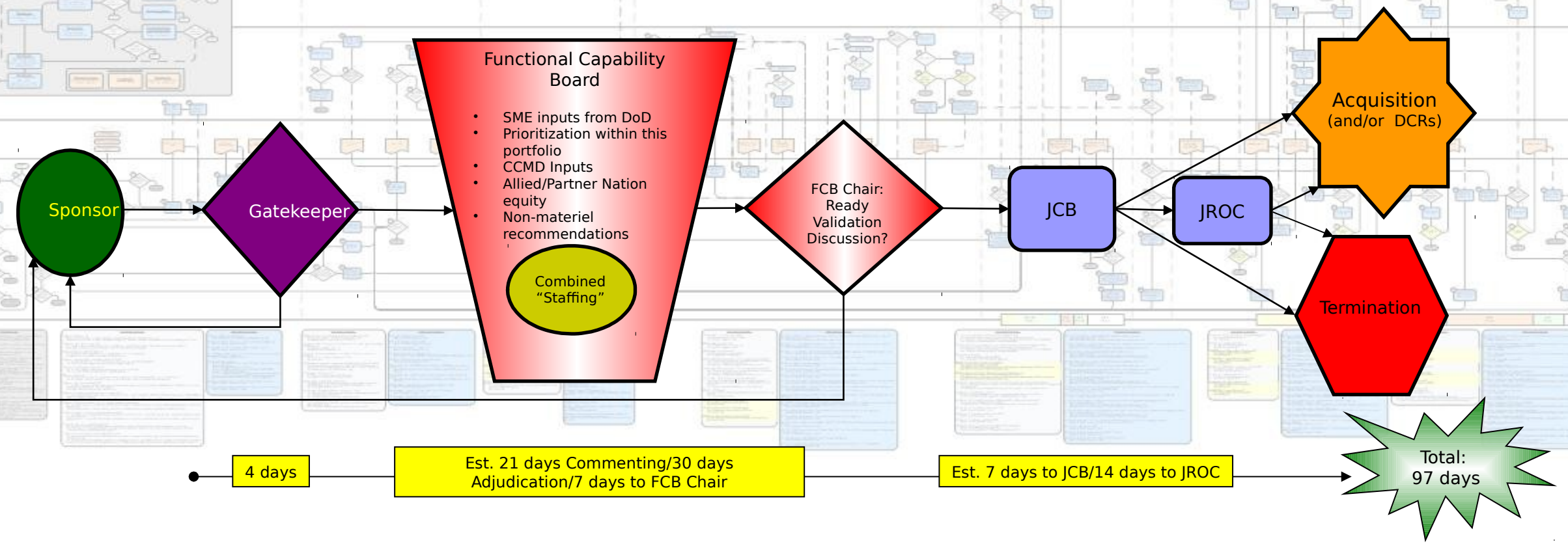
Additional JCAs:
- Building Partnerships
- Corporate Management & Support

*Ms Reardon, DASD for Supply Chain Integration, serves as Log FCB Co-Chair
**BGen Todorov, J8/DDJIAMDO, serves as Protection FCB Co-Chair for IAMD issues

FCB Membership: (O-6 level)

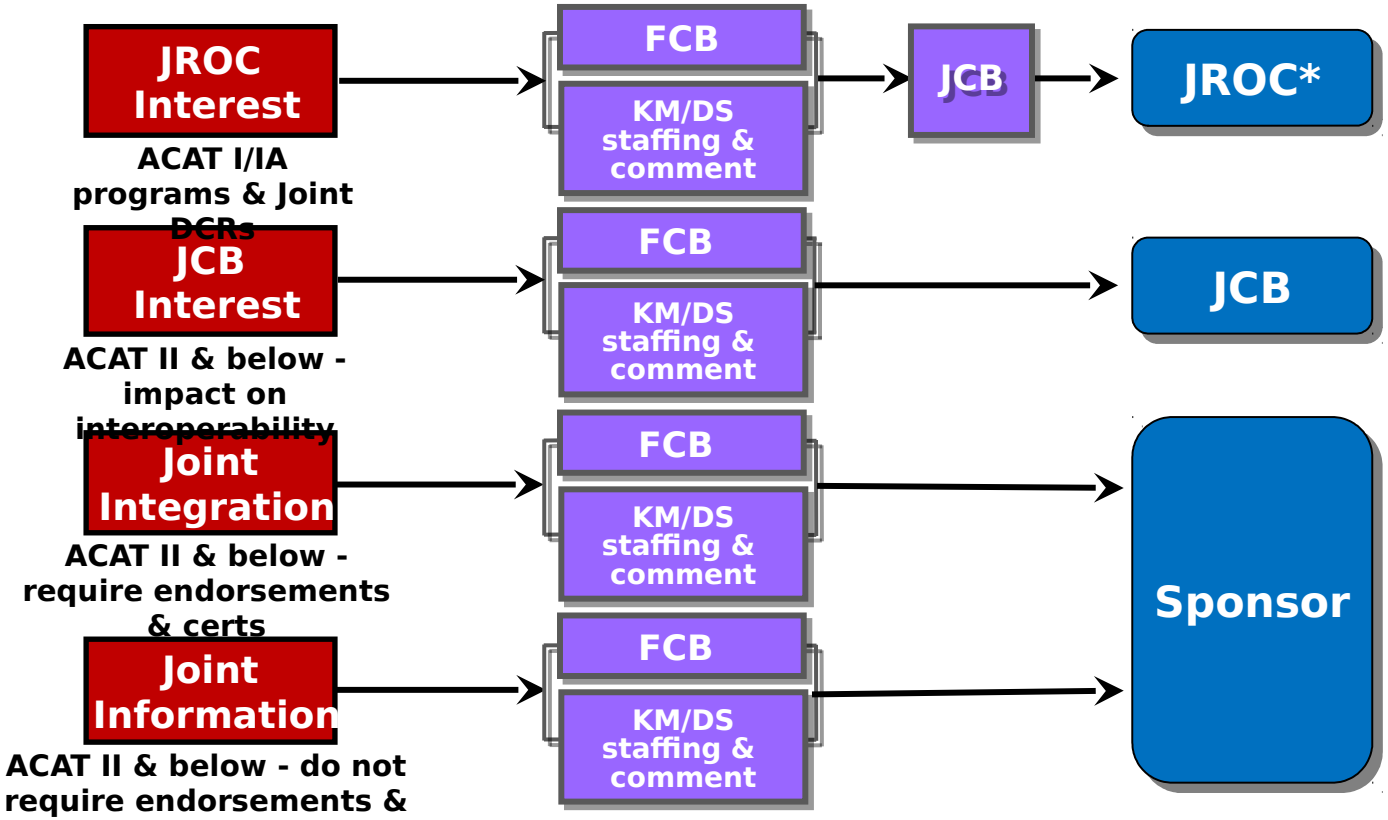
Services
CCMD Reps
OSD (AT&L)
OSD (I)
USecAF (Space)
DoD CIO
D/CAPE
DIA Rep (Threat)
ODNI/IRB
OSD (Comptroller)
Other DoD agencies as necessary

JCIDS Document Staffing (Joint Staff Only – NOT Service…)



Theoretical ICD max (CBA start to JROC validation): 277 days

JCIDS Document Tracking



* JROC may assert itself as the validation authority for any document of any assigned JSD at ANY time by directing JS J8 Gatekeeper to set the JSD to "JROC Interest"

Joint Staffing Designator (JSD)

Staffing & Prioritizing Body

Validation Authority

KM/DS: Knowledge Management/Decision Support tool

1st CBA Recommendation: Non-Materiel Approaches

Doctrine: change how we fight
Organization: change how we're organized to fight
Training: change how we train our DoD personnel
materiel: acquire what we already have in the field – existing COTS, GOTS, or NDI
Leadership: adjust the joint leader's professional development
Personnel: add or reassign people
Facilities: move or realign buildings & infrastructure
Policy: change policy that impacts how we fight

DOTmLPF - P Change Recommendation

2nd CBA Recommendation: Materiel Approaches

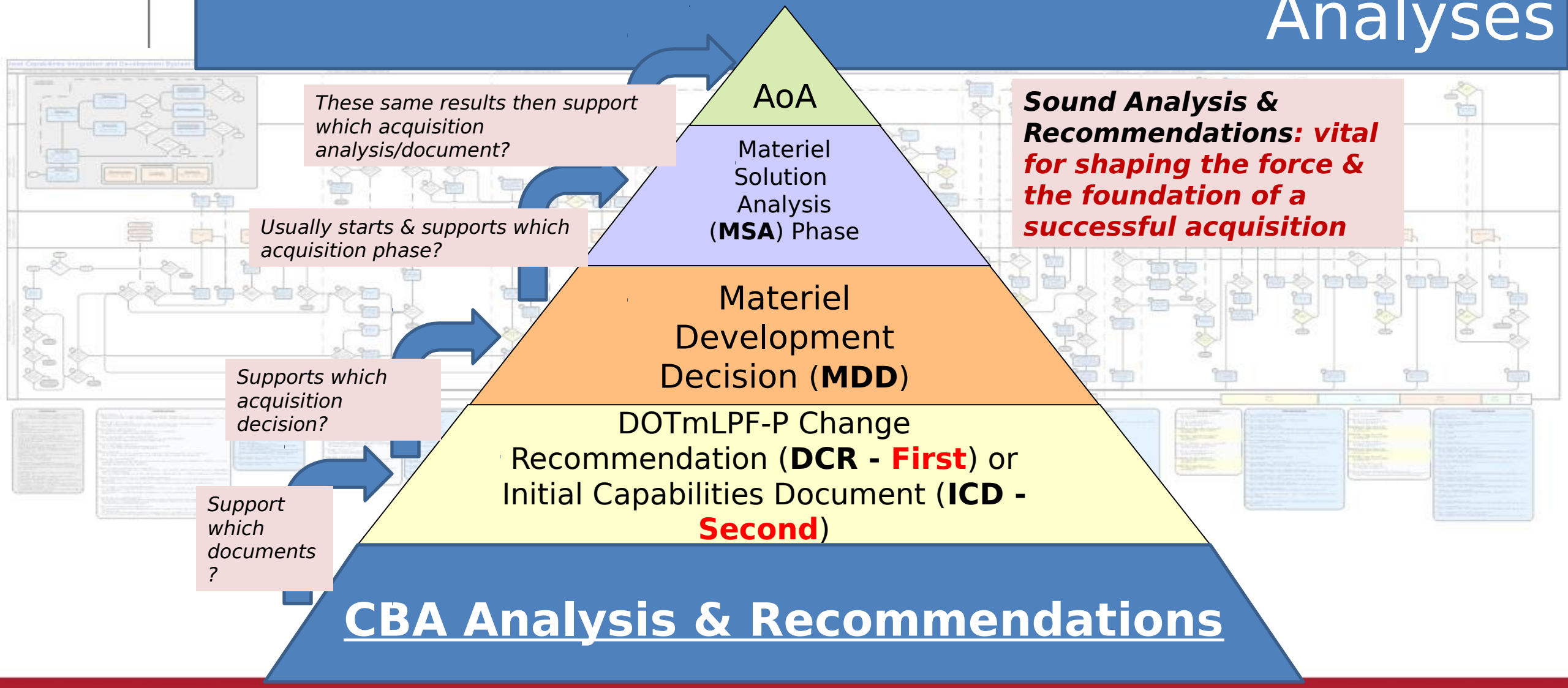
- ***Development & Fielding of Information Systems***
  - Or similar technologies with high obsolescence rates
  - Evolution of existing capabilities

- ***Evolution of Existing Systems***
  - Provide significant capability improvement
  - Replacing existing system with more capable system – could be NEW COTS, GOTS, or NDI
  - Simple recapitalization

- ***Transformational Systems***
  - Differ significantly in form, function, operation & capabilities
  - Significant improvement over current capability
  - Transforms how we accomplish mission

ateriel
baches

Bottom Line: Pre-MDD Capability Analyses

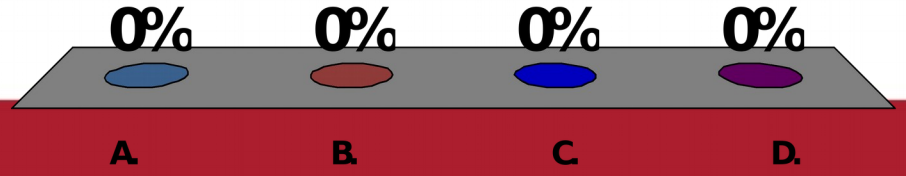

AoA
Materiel Solution Analysis (MSA) Phase
Materiel Development Decision (MDD)
DOTmLPF-P Change Recommendation (DCR - First) or Initial Capabilities Document (ICD - Second)
CBA Analysis & Recommendations
These same results then support which acquisition analysis/document?
Usually starts & supports which acquisition phase?
Supports which acquisition decision?
Support which documents ?
Sound Analysis & Recommendations: vital for shaping the force & the foundation of a successful acquisition

Sources for More Information

- JCIDS Intellipedia website (requires CAC login):
  - https://www.intelink.gov/wiki/JCIDS
- Defense Acquisition Mgmt Info Retrieval (DAMIR, requires CAC login):
  - https://ebiz.acq.osd.mil/DAMIR/PortalMain/DamirPortal.aspx
- Acquisition Info Repository (AIR, requires CAC login):
  - https://www.dodtechipedia.mil/AIR
- DASD/EC&P (Emerging Capability & Prototyping):
  - http://www.acq.osd.mil/ecp/
- DAU online course CLR 250, Capability-Based Assessments (CBAs):
  - http://icatalog.dau.mil/onlinecatalog/courses.aspx?crs_id=1718
- DAU Requirements Management Community of Practice (RMCoP):
  - https://acc.dau.mil/CommunityBrowser.aspx?id=204035
- DISA Joint Capability Technology Demonstration (JCTD) Process Briefing:
  - http://www.disa.mil/Mission-Support/Enterprise-Engineering/~/media/Files/DISA/Services/JCTD/JCTD_Process_Fundamentals.pdf
- DoD Issuances (Directive-Type Memorandum) website:
  - http://www.dtic.mil/whs/directives/corres/dir3.html

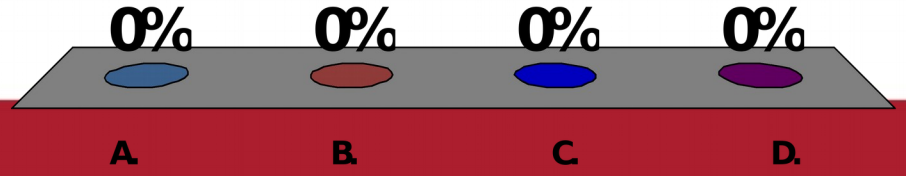
What does the JROC expect from Pre-MDD analyses?

A. Analytical depth
B. Specific recommendations
C. Analytical breadth
D. Action timetables



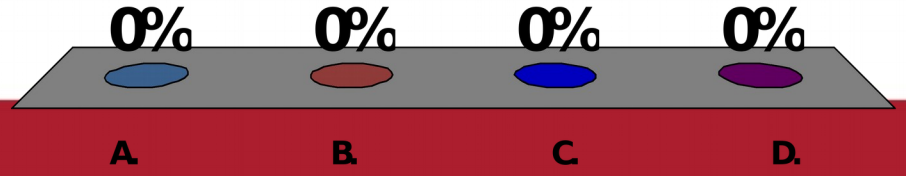
What's the maximum time a CBA should take?

A. 30 days
B. 90 days
C. 180 days
D. 277 days



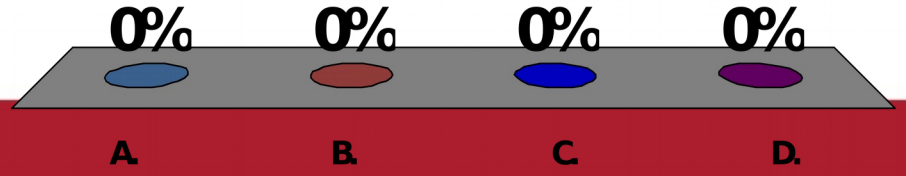
What recommendations can be submitted with a DCR?

A. Increasing manpower, operational tempo, spare parts, & fuel supplies
B. Recommend changing PME subjects or emphasis
C. Buying updates of commercial hardware in the inventory
D. All of these choices are correct



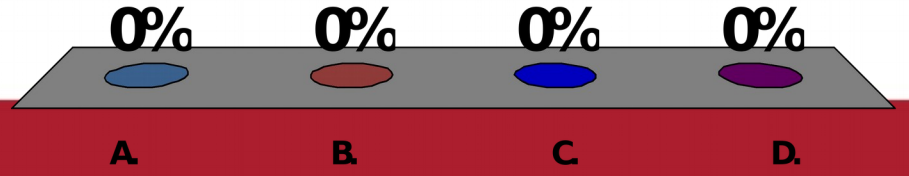
Which of the following is not an ICD predecessor document or input?

A. Joint Concepts
B. Validated Threat Documents
C. AoA Study Report
D. JCTD Operational Utility Assessment
E. All of these choices are correct



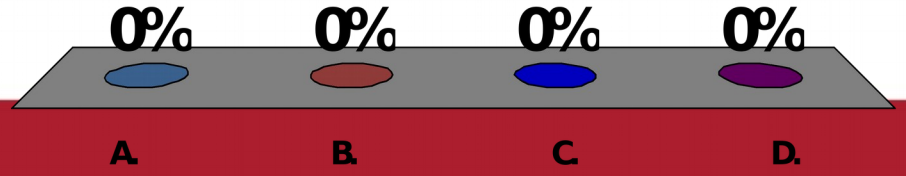
Which choice best represents the role of the CBA?

A. It maintains focus on developing specific solutions after sponsor initiation
B. It indirectly supports the ICD staffing process
C. It is analysis that underpins JCIDs
D. It directly supports the CDD staffing process
E. All answers are correct



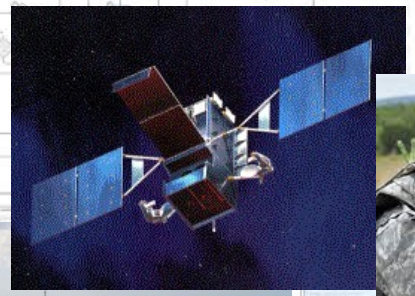
CBAs identify all but which of the following:

A. Possible non-materiel approaches
B. Operational risks
C. Materiel support approaches
D. Shortfalls in existing systems
E. All answers are correct



Back Up

Changes to the Process (23 February 2015…)



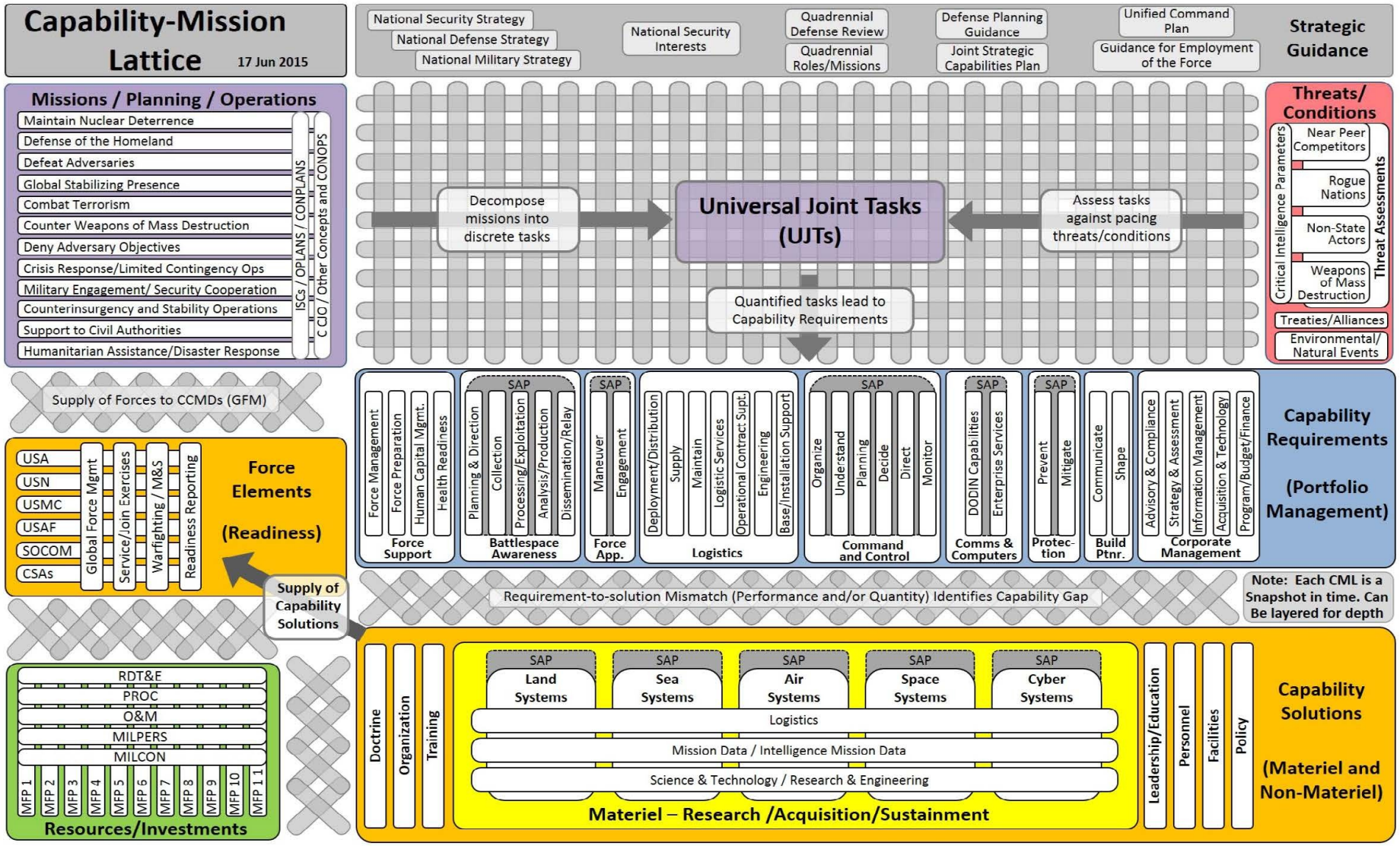
2015 Changes (1 of 2)

- Consolidated Guidance:
  - Cancel: CJCSI 3312.01 (Intelligence Certification), CJCSI 6212.01 (Net-Ready KPP), and JWSTAP Charter (Weapon Safety Endorsement)
    - Content absorbed into the three core documents:
    - CJCSI 5123.01 (JROC Charter), CJCSI 3170.01 (JCIDS), and the JCIDS Manual
    - Significant revision of Intelligence Certification content
- Capability Analysis & Developing Requirements:
  - Use DODAF to improve development activities
  - Increase emphasis on attributes being measurable and testable
  - Refocus on using S&T to satisfy capability gaps (BBP 3.0…)
  - Introduces Additional Performance Parameters (APAs)
  - Introduce the Capability-Mission Lattice (CML) to improve requirements traceability to operational missions

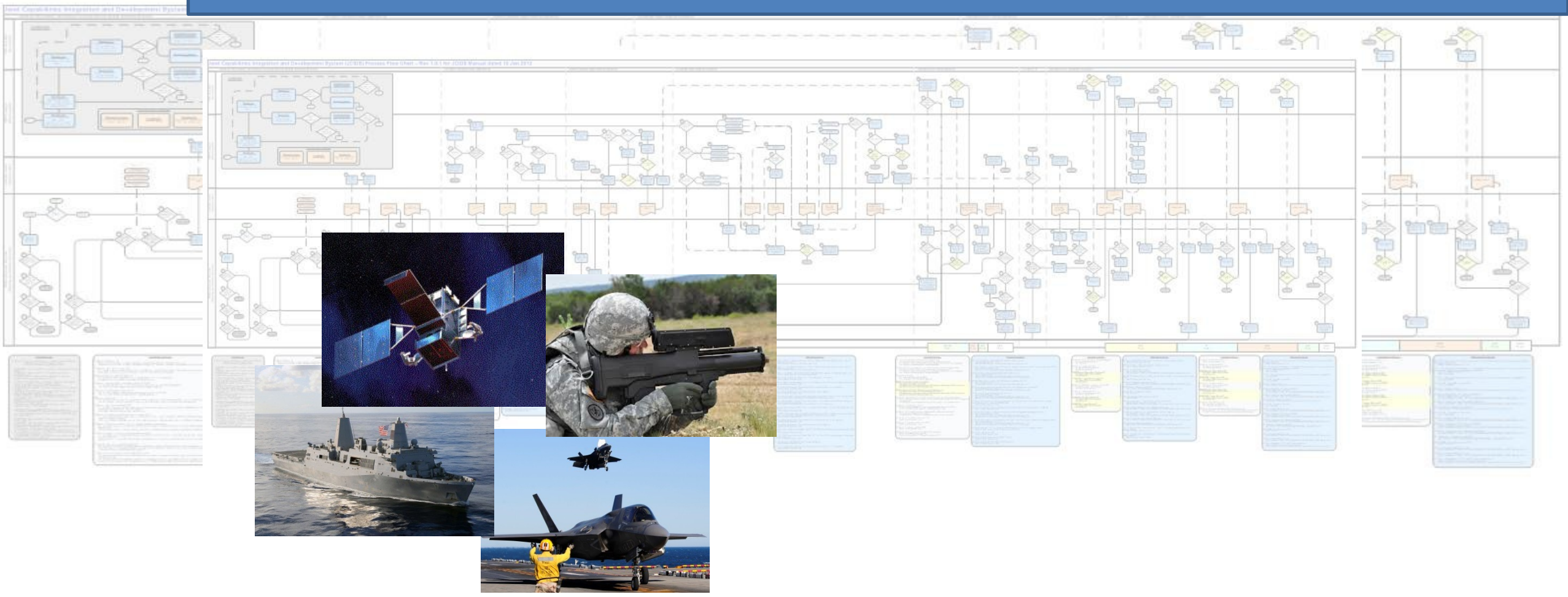
2015 Changes (2 of 2)

- Documents:
  - Streamline formats
  - Extend “IT Box” construct to create IS CDD
  - Align affordability sections of ICD, CDD, & CPD with 5000.02
  - Add Content/Endorsement guides for Mandatory KPPs, Weapon Safety endorsement, DOTmLPF-P endorsement, and Intelligence Certification
- Staffing:
  - Integrate gatekeeping with DCMO for Defense Business Systems
  - Clarify guidance for submitting & reviewing higher classified documents & issues (including SAP, SAR, and ACCM)
- Portfolio Management:
  - Consolidate “post-validation processes” and “prioritization” guidance into the “portfolio management” guidance.

Capability Mission Lattice (CML)



Changes to the Process (10 January 2012…)



JCIDS Changes (1 of 2)

- Requirements Training:
  - Mandated Requirements Management Certification Training (RMCT)
- Documents:
  - Mandatory Page Limits: ICD (10), DCR (30), CDD (45), CPD (40)
  - Implemented “IT Box” construct: the IS ICD.
- Post-Validation:
  - More definitive Tripwire Process: cost, schedule, & quantity changes
    - 10% cost over current baseline or 25% original baseline, IOC/FOC slip of 12 months from initiating JROCM, 10% reduction in end items

JCIDS Changes (2 of 2)

- JCB/JROC Validation:
  - More Tank-like, with limited audience to facilitate determinative discussion
    - JROC Principals+1, COCOM Principals+1
    - Statutory advisors or their Deputy (AT&L, CAPE, OT&E, OSD(P), OSD(C), JS J7…)
    - Minimal others by invitation only…
  - FCB Chair briefs JCB/JROC, NOT the Sponsor or PM.
    - FCB Chair tees up the appropriate debate - Sponsor/SME available for discussion
  - Validation decision considers Cost, Schedule, Performance and Quantity Targets (as appropriate) in JROCMs

J8 Gatekeeper

- Perform an initial review of all requirements proposals
  - Support provided by J7, J6, J8, & FCB WGs
- The Gatekeeper determines:
  - Joint Staffing Designator:
    - JROC Interest – potential ACAT I/IA
    - JCB Interest – potential ACAT II & below
    - Joint Integration – potential ACAT II & below, no joint force impact, no additional reviews necessary, staffing needed for applicable certs
    - Joint Information – potential ACAT II & below, may impact services or agencies but not joint force, no certs,
    - Lead and supporting FCBs
- Formal staffing begins after Gatekeeper decisions

Sample JCA & Tiering

- 2 Battlespace Awareness – The ability to understand dispositions and intentions as well as the characteristics and conditions of the operational environment that bear on national and military decision-making.
- 2.1 Intelligence, Surveillance and Reconnaissance – The ability to conduct activities to meet the intelligence needs of national and military decision-makers.
- 2.1.1 Intelligence, Surveillance and Reconnaissance Planning and Direction – The ability to synchronize and integrate the activities of collection, processing, exploitation, analysis and dissemination resources to meet information requirements of national and military decision-makers.
- 2.1.1.1 Define and Prioritize Intelligence, Surveillance and Reconnaissance Requirements – The ability to translate national through tactical objectives and needs into specific information and operational requirements for ISR.
- …
- 2.2 Environment – The ability to characterize and exploit the meteorological, space and oceanographic information from the sub-bottom of the earth’s oceans up to and including space.
- …

RQM 310:
ICD Review – Compare & Contrast

Defense Acquisition University

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Professor, Requirements Management
Defense Systems Management College
Defense Acquisition University
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(703) 805-4369

July 20, 2015

Lesson Objectives

- Develop a more “discerning eye” when reviewing capability identification documents
- Compare and contrast three actual ICDs
  - One JCIDS compliant, one partially compliant, and one non-compliant
- Build a bridge between old documents and current guidance

First, some questions...

Is JCIDS Broken?

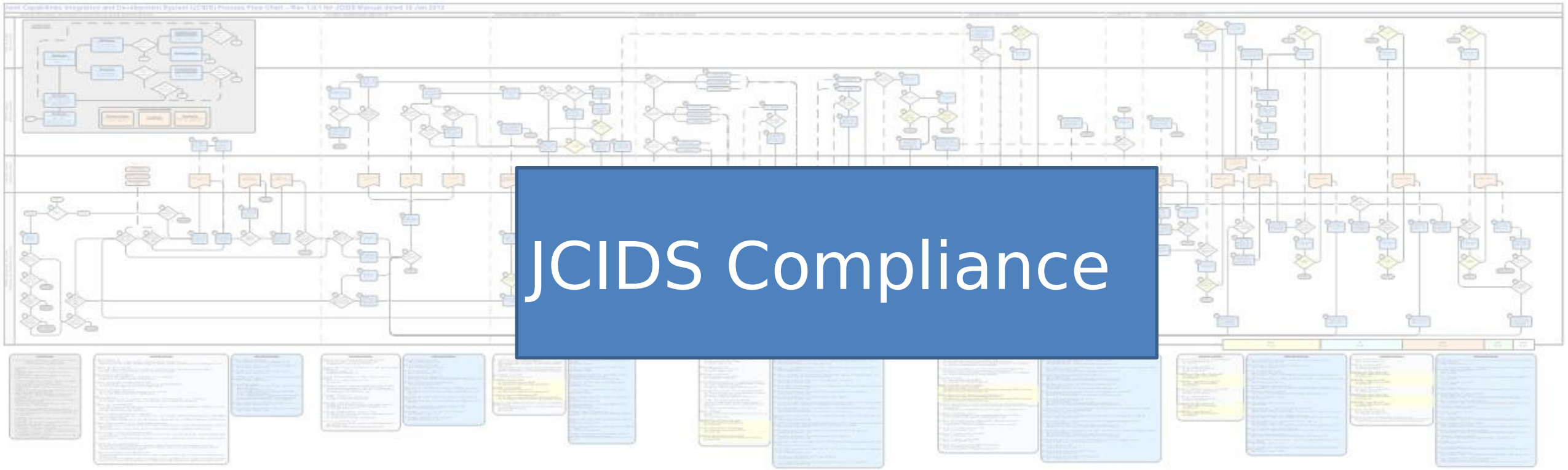
- Could it be that:
  - JCIDS (the process) is NOT focused on materiel solutions – YET the people doing JCIDS analysis might be?
    - Does JCIDS fully account for existing & non-materiel solutions? and
    - Is the analysis supposed to exhaust those possibilities before identifying materiel approaches?
  - Everything in the Pentagon is risk-averse & overly bureaucratic—not just JCIDS? AND the JS intentionally built JCIDS that way?
    - As a taxpayer, do you want everything vetted at every level?
    - Whether or not it is the “right” answer?
    - That nobody disagrees with?

Bad ICDs?

- There are many BAD ICDs that the validation authorities approve. Why?
  - Time
  - Apathy / lack of equity
  - Expertise
  - “Back scratching mentality”
  - Nobody reads them / who cares
  - Great brief - bad ICD
- Is it the process — or lack of discipline inside the process? Both? Neither? Why?

ICD Titles

- Why might a simple title be so important?
- How about these ICD titles? Specify solution?
  - Biometric Enabling Capability (BEC)
  - Ground Combat Vehicle (GCV)
  - Improved Cargo Airdrop Capability (ICAdC)
  - Light Mobility Aircraft (LiMA)
  - Airborne ISR Transport (AIT)
  - Future Cargo Aircraft (FCA)
  - Infectious Disease Countermeasures (IDCM)
  - Light Utility Helicopter (LUH)
  - Vessel-to-Shore Bridging (VSB)
  - Expeditionary Fighting Vehicle (EFV)



JCIDS Compliance

Compliance

- Two parts:
  - Content – does underlying analysis meet the intent of guidance?
  - Format – does the document comply with JCIDS Manual?
- Capstone guidance for CBAs / ICDs
  - Validation of an ICD ensures the
    - Capability requirements and proposed IOC/FOC meet National Military Strategy (NMS) and Combatant Commander (CCMD) need
    - DoD prioritizes capability requirements that do not provide **unnecessary** redundancy across the Joint Force

Today's C & C Limitations:

- No usable ICDs developed under current JCIDS guidance:
  - Hence, we'll focus on content, not format
  - However, we will briefly look at the differences…
- J8 JCIDS intent remains the same
  - Slight change in emphasis with new format

Document Content Changes ICD

Jan 2012 → **Feb 2015**

- Cover Page
- Executive Summary
- Sections
  1. CONOPS Summary
  2. JCAs
  3. Capability Requirements
  4. Capability Gaps and Overlaps/Redundancies
  5. Threat and Operational Environment
  6. Assessment of Non-Materiel Approaches
  7. Final Recommendations
- Appendices
  A. Architecture Data
  B. References
  C. Acronym List
  D. Glossary

10 pages*

- Cover Page
- Validation Page
- Executive Summary
- Sections
  1. Operational Context
  2. Threat Summary
  3. Capability Requirements and Gaps/Overlaps
  4. Assessment of Non-Materiel Approaches
  5. Final Recommendations
- Appendices
  A. References
  B. Acronym List
  C. Glossary
  D. Classified Annex (optional)

13 Pages**

* In 2012 the 10 page limit applied to the body (7 sections) and Appendix A

What's In A Title?

- JROC approved all three
  - Jun 2009 - "Armed Aerial Scout" (AAS, sponsor: USA)
  - Apr 2010 - "Airborne Strategic Deterrence" (ABSD, sponsor: USAF)
  - May 2013: "Joint Health Risk Management" (JHRM, sponsor: USNORTHCOM)

1. Concept of Operations Summary

- Describe the relevant parts of the Joint Concepts, CONOPS, and/or Unified Command Plan (UCP) - assigned mission
  to which the capability requirements identified in the ICD contribute
  - What operational outcomes they provide
  - How they complement the integrated joint / multinational warfighting force
  - What enabling capabilities are required to achieve the desired operational outcomes.

Armed Aerial Scout (AAS)
1. Concept of Operations Summary

- Identify the UCP-assigned mission
  - "The fundamental purpose of an Armed Aerial Scout is to conduct armed reconnaissance, security operations, and attack missions in support of full spectrum operations. In doing so, it improves the commander's ability to maneuver and concentrate superior combat power against the enemy at the decisive time and place." (FM3-04, Attach Rec Helo Ops, 2007)
- Operational outcomes
  - "The precise application of combat power and effective synchronization of maneuver and supporting fires require a current and accurate picture of the enemy's current dispositions and activity within a given area of operations. An Armed Aerial Scout plays a critical role in providing this information and provides advantages over other intelligence sources by countering enemy deception efforts, providing improved real-time situational awareness and assessing terrain."

Airborne Strategic Deterrence (ABSD)
1. Concept of Operations Summary

- Identify the UCP-assigned assigned mission
  - CDRUSSTRATCOM is the lead combatant commander for strategic deterrence planning and is responsible for executing strategic deterrence operations." Unified Command Plan, 17 Dec 2008, p. 27
  - The capabilities identified in this Initial Capabilities Document (ICD) directly contribute to the deterrence mission as identified in USSTRATCOM's Deterrence Operations Joint Operating Concept (DO JOC) , tasks established in the Unified Command Plan and requirements …….
- Operational outcomes
  - (a) assure friends and allies, (b) dissuade potential adversaries from developing or expanding inventories of (c) deter potential adversaries
- Integrate into the joint / multinational warfighting force
  - deterrence capabilities complement the joint warfighter's integrated campaign plan -- preventing the need to escalate to armed conflict.

Airborne Strategic Deterrence (ABSD)
1. Concept of Operations Summary

- Identify enabling capabilities to achieve operational outcome
  - Enabling capabilities required to achieve Assurance, Dissuasion And Deterrence (ADD) include:
    - an understanding of allied and adversary goals, priorities and values
    - an effective Intelligence, Surveillance and Reconnaissance (ISR) providing early warning, assessing programs and threats, adversary behaviors and intentions, targeting, and post attack analysis
    - a secure, survivable Command, Control and Communications
    - the building and cultivation of strategic partners
    - the maintenance of a robust and responsive conventional and nuclear industrial base to sustain capabilities over time and
    - an effective hedge against technical and/or geopolitical uncertainties.

2. Joint Capability Areas (JCAs)

- Cite the applicable Tier 1 and Tier 2 JCAs
- Range of military operations
- Timeframe for IOC based upon input from CCMD / AQ
- Relevant Integrated Security Constructs (ISC), if applicable

Integrated Security Constructs (ISCs) - Developed as part of the DoD Analytic Baseline. ISCs contain scenarios for major combat operations. Military objectives of the ISCs provide a source for developing the list of required capabilities.

Armed Aerial Scout (AAS)
2. Joint Capability Areas (JCAs)

- Cite the applicable JCAs
  - Battlespace Awareness
  - Force Application
  - Command and Control
  - Net-Centric
- Timeframe
  - timeframe from 2015 through approximately 2024
- Relevant Defense Planning Scenarios (DPS, now ISC) - ?????
- Range of military operations
  - Conventional Warfare
  - Forcible Entry
  - Unconventional Warfare
  - Show of Force
  - Peace Enforcement
  - Peacekeeping Operations
  - Normal and Routine Military Operations

Airborne Strategic Deterrence (ABSD)
2. Joint Capability Areas (JCAs)

- Cite the applicable JCAs
  - ABSD capabilities reside in FA, supporting the Maneuver and Engagement Tier 1 & 2 JCAs
  - Supporting capability areas include: Battlespace Awareness (BA), Command and Control (C2), Corporate Management (CM), Force Support (FS), Net Centric (NC) and Protection (FP)
- Range of military operations
  - Deterrence capabilities are applicable across the entire Range of Military Operations (ROMO)
- Timeframe
  - a 2020 threat environment.
- Relevant Defense Planning Scenarios (DPS – now ISC)
  - The ABSD CBA was informed by Defense Planning Scenarios (DPS) 2-4 (Bipolar, Multi-polar and Global Insurgency worlds). Table 2.1 lists the Steady State Security Posture (SSSP) vignettes

3. Capability Requirements

- Describe capabilities required in CBA or other study
  - Why are they essential to Sponsor to achieve goals / objectives
  - Relate to Concept, CONOPs, UPC-assigned mission
- Address compliance with OSD, Joint, National, International, policies and regulations
- Define capability requirements in JCA lexicon
  - UJTLs / METLs
  - Relevant Range of Military Operations
  - Timeframe Under Consideration
- Operational attributes, qualitative parameters, metrics
  - Minimum value below which capability will no longer be effective

UJTL: Universal Joint Task List
METL: Mission Essential Task List

Armed Aerial Scout (AAS)
3. Capability Requirements

- Describe capabilities required in CBA
  - …the need for an Armed Aerial Scout to enable dominant maneuver for the joint air-ground maneuver force by providing aggressive combined arms reconnaissance.
- Why are they essential for JFC to achieve objectives
  - The Joint Force Commander (JFC) requires a relatively low cost, armed aerial scout platform that requires minimal training support, is supportable within the planned logistics environment, affordable with the planned level of logistics resources throughout the lifecycle, and is interoperable with organic and joint fires systems and manned/unmanned aviation platforms.

relatively low cost minimal training affordabl resources throughout the lifecycle

Armed Aerial Scout (AAS)
3. Capability Requirements

- Capability is required to comply with OSD, Joint, National policies
  - ????????
- Identify JCAs to which capability contributes
  - Force Application
  - Command and Control
  - Net-Centric
  - Protect
- Use JCAs to describe capabilities
  - The Armed Aerial Scout capability gap has been repeatedly identified in previous studies and analysis including: …….
  - current rotary wing aircraft employed by Army aviation in the armed reconnaissance role have shortcomings in performance, lethality, interoperability and survivability.

capability gap has been repeatedly identified

current

Airborne Strategic Deterrence (ABSD)
3. Capability Requirements

- Describe capabilities required in CBA
  - These required capabilities (listed alphabetically) from the CBA formulated the ICD recommendations.
    - (U) Adaptable
    - (U) Clear/Visible.
    - (U) Credible
    - (U) Effective.
    - (U) Endurable.
    - (U) Global in Coverage.
    - (U) Persistently Present.
    - (U) Responsive.
    - (U) Survivable.
    - (U) Tailorable.

Airborne Strategic Deterrence (ABSD)
3. Capability Requirements

- Capability is required to comply w/OSD, Joint, National policies
  - above capabilities are essential because they provide credible deterrent tools to the National Command Authority and the Joint Force Commander to achieve military objectives which support Assurance, Dissuasion and Deterrence (ADD).
- Identify JCAs to which capability contributes
  - directly support both Maneuver and Engagement in the Force Application (FA) Tier 1 JCA.
- Use JCAs to describe capabilities
  - The ABSD capabilities do not apply to any Tier 1 & Tier 2 JCAs that have been prioritized by the SWarF process. The STRATCOM SWarF process identified nuclear strike attributes but did not prioritize JCAs
  - These capabilities are rooted in previous USSTRATCOM deterrence analysis and refined in the USSTRATCOM Senior Warfighter Forum (SWarF). A crosswalk of SWarf attributes with ABSD capabilities is found in Appendix I

We'll Stop here & look at a more recent example...

Other Sections:

- We'll stop here…
  - Section 4, Capability Gaps and Overlaps/Redundancies
  - Section 5, Threat and Operational Environment
  - Section 6, DOTmLPF-P
  - Section 7, Final Recommendations

Document Content Changes ICD

Jan 2012 → **Feb 2015**

- Cover Page
- Executive Summary
- Sections
  1. CONOPS Summary
  2. JCAs
  3. Capability Requirements
  4. Capability Gaps and Overlaps/Redundancies
  5. Threat and Operational Environment
  6. Assessment of Non-Materiel Approaches
  7. Final Recommendations
- Appendices
  A. Architecture Data
  B. References
  C. Acronym List
  D. Glossary

10 pages*

- Cover Page
- Validation Page
- Executive Summary
- Sections
  1. Operational Context
  2. Threat Summary
  3. Capability Requirements and Gaps/Overlaps
  4. Assessment of Non-Materiel Approaches
  5. Final Recommendations
- Appendices
  A. References
  B. Acronym List
  C. Glossary
  D. Classified Annex (optional)

13 Pages**

* In 2012 the 10 page limit applied to the body (7 sections) and Appendix A

Bottom Line for DoD ICDs:

- Regardless of format, you just might have a “Bad” ICD if it…
- Has the solution in the title …..
- Clearly states “No CBA or comparable analysis was conducted…..
- Refers only to Lessons Learned and Past Studies…..
- Makes no mention of Joint Operations…..
- Has a timeframe of last year, this year, or next year…..
- Makes no reference to any DPS (ISC) or joint warfighting scenarios…..
- Makes no reference to why mission accomplishment needs these capabilities…..
- Lists solutions instead of approaches to solutions…..
- Does not describe any significant non-materiel analysis & rationale…..
- And finally --- the OV-1 does not show all 5 Services!

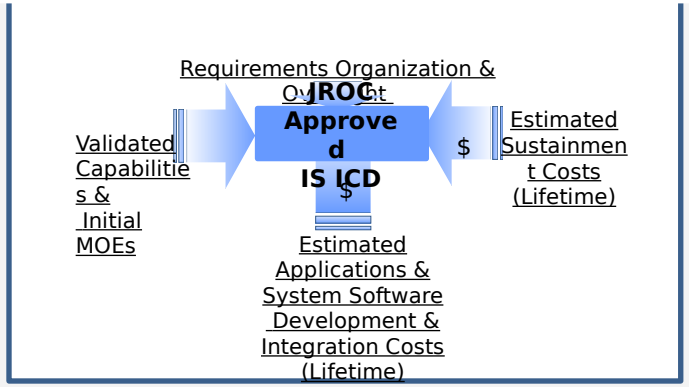
Capabilities Requirements Documents for Information Systems (IS) and Information Technology (IT)

Tom Fritz
thomas.fritz@dau.mil

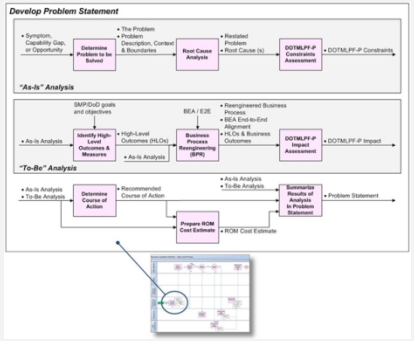
Lesson Objectives

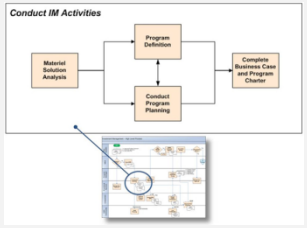
- Introduce IT Box review exercise – GEMSIS IT Box CDD (conducted Thursday)
- Know how the JCIDS documents and process are modified when using the IT Box guidance in JCIDS manual for warfighter IT/IS development
- Identify the Business System Document portion that contains capability requirements for business IT/IS development

IT Box – (current JCIDS manual)



DoDI 5000.02, Encl 12 replaces Defense Acquisition Guidebook Chapter 12





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PREVIEW: Thursday

IT BOX review responsibilities

Thursday 23 July 2015 - IT Box
Clsrm and Conf Room Temp Files
RQM 310 JUL FY 15
Exercises ICD CDD FC
Thursday 23 July 2015 - IT Box
Organize
Burn
New folder
PMT402
Presentations
REOW
Rozier
RQM 310 JUL FY 15
AJ
BIOS
COURSE SLIDES
Exercises ICD CDD FCB
FCB Exercise
ICDs, CDD for EXERCISES
July 2015 Pre-Class Assign
Thursday 23 July 2015 - I
Name
Date modified
Type
Size
IT related Capabilities docs 6/11/2015 8:20 AM File folder
Other GEMSIS information 6/11/2015 11:00 AM File folder
Binder1.pdf 6/9/2015 2:30 PM Adobe Acrobat Doc... 31,361 KB
Tab 0 Thursday GEMSIS review assignments... 6/5/2015 11:11 AM Microsoft PowerPoi... 190 KB
Tab 1 Lesson 7, Cap Req Docs for- Info an... 6/5/2015 11:09 AM Microsoft PowerPoi... 4,086 KB
Tab 2 Joint GEMSIS IS CDD 16 Apr 2014 wit... 4/29/2015 3:18 PM Adobe Acrobat Doc... 21,481 KB
Tab 3 GEMSIS Charter for Configuration Ma... 7/22/2014 11:55 AM Adobe Acrobat Doc... 1,526 KB
Tab 4 GEMSIS RDP.pdf 2/18/2014 1:41 PM Adobe Acrobat Doc... 8,012 KB
4/29/2015 3:22 PM Adobe Acrobat Doc... 352 KB
Tab 6 highlights for INFO SYS in 5123 3170 ... 2/13/2015 1:16 PM Adobe Acrobat Doc... 6,000 KB

Thursday: GEMSIS IT BOX CDD review responsibilities

Organization & Oversight
Chair:

Co-chairs:

Table 1

Table 2 & 6

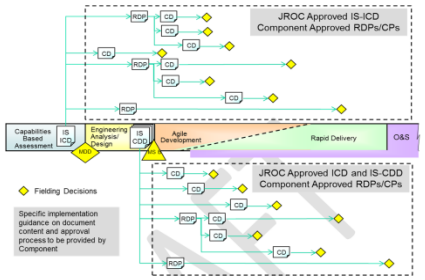
Table 4 & 8

Key Performance Parameters
- KPP#l
- KPP#2
- KPP#3

GEMSIS Increment 2
JROC Approved
Oversight – STRATCOM J6
& Joint Staff J6
Program Execution
DISA/GEMSIS PMO

Hardware Refresh and System Enhancements & Integration
- *Lifecycle* Cost= $ (FY
- Per year = $ M
- Rationale:

Table 5 RDP



Applications & System Software Development
- Lifecycle Cost = $ (FY__ to __)
- Per year = $

Rationale: Provide

Table 3 & 7

Adapting Capabilities Requirements Documents for IT /IS

- IF: The JCIDS process and documents optimized for MDAP hardware with high cost of sustainability
- THEN: JCIDS documents and process tend not to be supportive of the rapid pace of development and deployment IS systems/capabilities needed to meet operational needs.
- PROCESS TO-BE: Provide agile and responsive Capabilities Requirements documents and process to enable rapid development of IS capabilities
- PROCESS IMPROVEMENT: SEVEN aspects of the JCIDS process are modified by the “IT Box” in conjunction with changes in the acquisition process, to meet the needs of the operational user so that new capabilities can be delivered rapidly, and adapted as necessitated by changes in the operational environment

- ***Discussion: What are some typical categories of DoD and Service IT/IS systems?***

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Assumptions

- IS development is different from major weapon systems development
  - Modify their processes and documentation expectations accordingly (DODI 5000.02)
- The test and certification communities can deliver more responsive test and certification processes to achieve timely delivery of capabilities
  - Necessitates incremental/iterative development and testing
- Validation authority for managing requirements can be pushed down to a lower level to better enable adjustment to capability deployment schedule and KPP level performance decisions (normally retained as a JROC authority)

Seven areas of JCIDS affected by “IT Box” guidance

- Capabilities Document content and supporting Analysis for ICD and CDD
- FCB briefing format
- Validating JROCM format
- Follow on capability document format loosely defined as Requirements Definition Package (RDP) with Capabilities Drops (CD)
- Designation of an Oversight Body with more authority than typically delegated for Joint Capabilities Requirements
- NR KPP table defined immediately
- Funding table defined immediately

Definition of the IT Box – JCIDS Manual : Enclosure D *IS ICD, IS CDD*

IS ICD, JCIDS Manual Page D-32

Organization & Oversight

Flag-level oversight thru [describe]

Capabilities and Initial Minimum Values

- Capability #1 [Describe] = initial value
- Capability #2 [Describe] = initial value
- Etc. [List the operational attributes/ initial values that apply to this IS-ICD]

“Boundaries”
JROC-Approved
IS ICD
[Topic name]

Oversight – [Name]
Execute – [Name]

Hardware Refresh and System Enhancements &I ntegration:

- *Per year =$XX*
- *Lifecycle Cost = $XX*
- *Rationale….*

Application and System Software Development:

- *Per year =$XX*
- *Lifecycle Cost = $XX*
- *Rationale….*

- ***Biannual status review by the Lead FCB***
- ***Revalidation by JCB / JROC if:***
  - ***a) new core capabilities added to the ICD***
  - ***b) Increase programmed development and integration funding***
  - ***c) Disestablishment of oversight body or designation of new oversight body***

Definition of the IT Box – JCIDS Manual : Enclosure D *IS ICD, IS CDD*

IS CDD, JCIDS Manual page D-65

Key Performance Parameters

- Capability #1 [Describe] = initial value
- Capability #2 [Describe] = initial value
- Etc. [List the operational attributes/ initial values that apply to this IS-ICD]

Organization & Oversight

Flag-level oversight thru [describe]

“Boundaries”
JROC-Approved
IS CCD
[Topic name]

Oversight – [Name]
Execute – [Name]

Application and System Software Development:

- *Per year =$XX*
- *Lifecycle Cost = $XX*
- *Rationale….*

Hardware Refresh and System Enhancements &I ntegration:

- *Per year =$XX*
- *Lifecycle Cost = $XX*
- *Rationale….*

- ***Biannual status review by the Lead FCB***
- ***Revalidation by JCB / JROC if:***
  - ***a) new core capabilities added to the ICD***
  - ***b) Increase programmed development and integration funding***
  - ***c) Disestablishment of oversight body or designation of new oversight body***
  - ***d) Exception: Changes to MAIS programs proposed in conjunction***

Funding Table & NR KPP Table

	FY xx	FY xx+1	FY xx+2	FY xx+2	FY xx+2	FY xx+2	FYDP Total	Post-FYDP (FYyy-FYzz)	Life Cycle Cost (FYxx-FYzz)

Example NR KPP table
(derived from Table D-E-3 , JCIDS Manual)

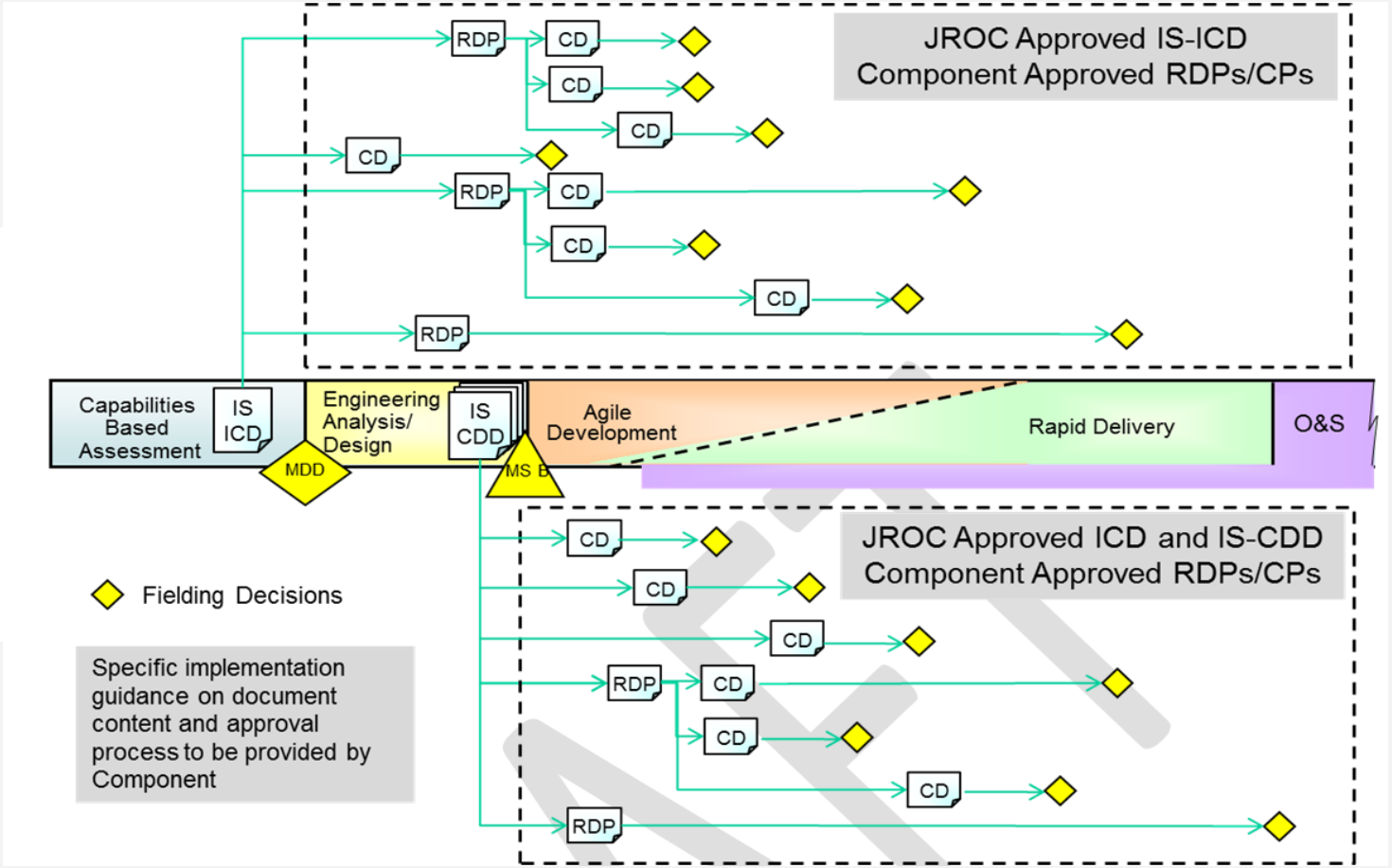
	Mission: Tracking and locating (Finding, Fixing, Finishing) High-Value Target (HVT) **Measure:** Timely, actionable dissemination of acquisition data for HVT **Conditions**: Targeting quality data to the neutralizing/tracking entity	≤10 minutes Area denial of HVT activities
	Mission Activities: Find HVT **Measure:** Location accuracy **Conditions:** Individual differentiation	100 meter circle Identify armed/ not armed
	Network: SIPRNET **Measure:** Time to connect to an operational network from power up **Conditions:** Continuous Network Connectivity	≤2 minutes
	Network: NIPRNET **Measure**: Time to connect to an operational network from power up **Conditions**: Continuous Network Connectivity	Up to 2 minutes
	Information Element: Target Data **Measure**: Dissemination of HVT biographic and physical data **Measure**: Latency of data **Condition**: NSA Type 1 Certified Encryption **Condition**: Continuous Network Connectivity	<10 seconds <5 seconds

Applicability of the JCIDS IT Box
(*see JCIDS Manual IS ICD, IS CDD*)

- Efforts where an IT box may be considered:
  - JROC Gatekeeper oversight (Life cycle program costs ≥ $15 million)
    - Hardware: All hardware associated with an IS-ICD must be COTS/GOTS. Hardware modifications are restricted to those necessary for system integration and enhancements to meet capability requirements. Includes periodic refresh through lifecycle.
    - Software - Development, integration, and acquisition of customized applications, including commercial IS capability solutions with integrated, DOD-specific performance characteristics/standards. Includes continued development and deployment through lifecycle.
- IT box IS NOT appropriate where:
  - Software is embedded as a subset of a capability solution developed under other validated capability requirement documen
  - IT capability gap is better addressed by DBS process

DBS: Defense Business Systems COTS: Commercial off the shelf
HW: Hardware GOTS: Government off the shelf

IT Box & Requirements Management



- Must meet data requirements for NR KPP certification
  - *CDDs and CPDs required for programs identified as MDAPs (there are currently no MDAP – MAIS programs)*

◇ **Fielding Decisions**

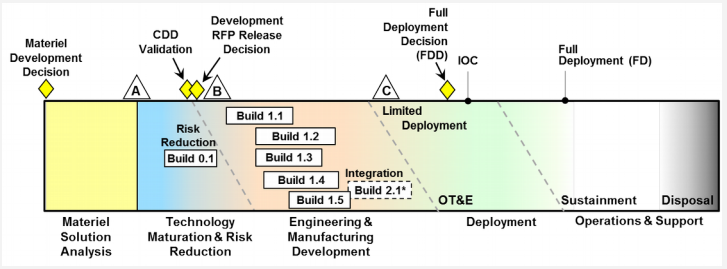
defense business system description -enclosure of 12 dodi 5000.02 jan 7, 2015

- Have a life-cycle cost in excess of $1 million over the current Future Years Defense Program
- An information system, other than a National Security System, operated by, for, or on behalf of the DoD, including:
  - financial systems
  - management information systems
  - financial data feeder systems
  - the information technology and cybersecurity infrastructure used to support business activities, such as
    - contracting
    - pay and personnel management systems
    - some logistics systems
    - financial planning and budgeting
    - installations management

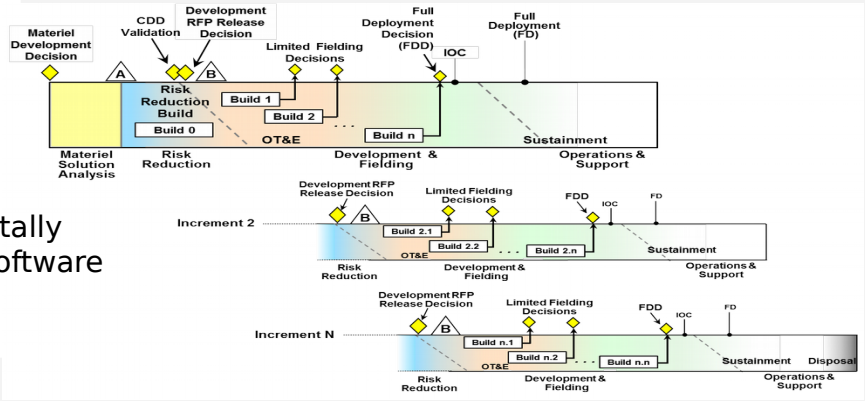
Capabilities Requirements in Business System Lifecycle Documents – DoDI 5000.02 Encl 12

- Prior to MDD:
  - Problem Statement
- After MDD:
  - *Updated* Problem Statement

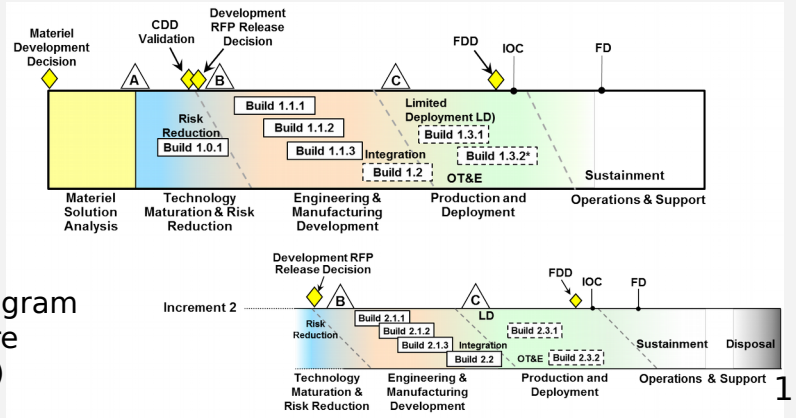
Model 2: Defense Unique Software Intensive Program



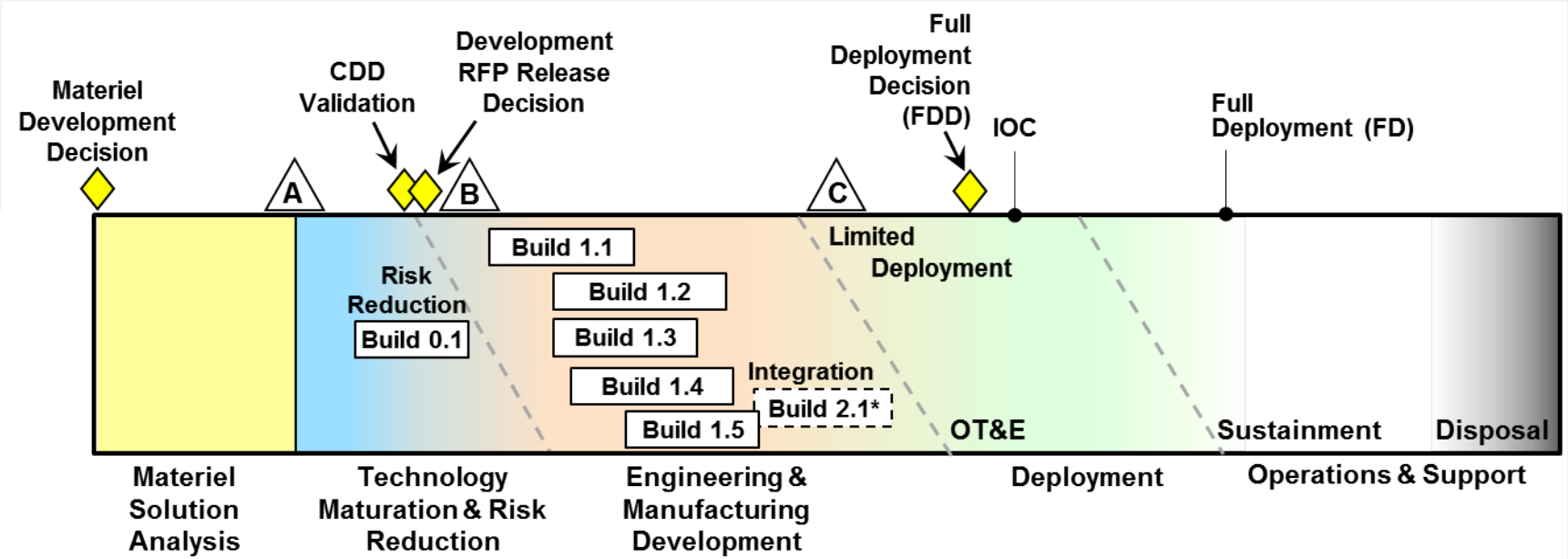
Model 3: Incrementally Fielded Software Intensive Program



Hybrid Program B (Software Dominant)



Model 2: Defense Unique Software Intensive Program



- **Complex, usually defense unique, software program that will not be fielded until several software builds have been completed.**
- **Examples: command and control systems and significant upgrades to the combat systems found on major weapons systems such as surface combatants and tactical aircraft.**
- **Several software builds are typically necessary to achieve a deployable capability.**

***The actual number and type of builds during the program will depend on system type.**

PREVIEW: Thursday Assignment

Review GEMSIS IT Box CDD

– Template and documents in K Drive

– Thursday 1 hour discussion

Documents for Thursday review located in:

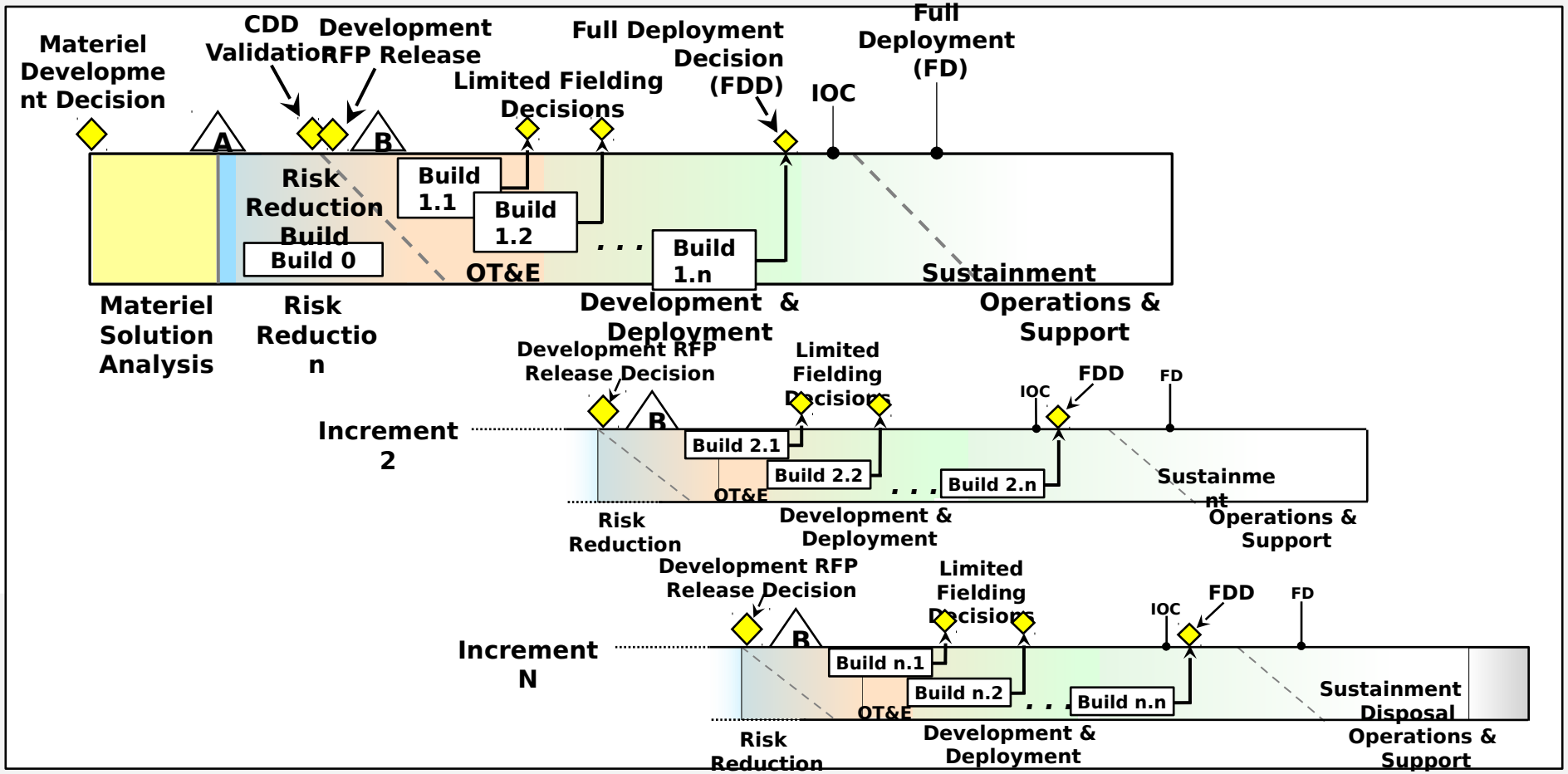
K:\ Clsrm and Conf Room Temp Files\ RQM 310 Oct 2013\ Exercises

Resources

BBP 3.0	**http://bbp.dau.mil**	
NSS	http://www.whitehouse.gov/sites/default/files/docs/2015_national_security_strategy.pdf	
QDR	http://www.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf	
Joint Electronic Library + JDEIS	CAC enabled https://jdeis.js.mil/jdeis/index.jsp	
JCIDS	CAC enabled https://intellipedia.intelink.gov/wiki/JCIDS	
DoD 5000.02	http://www.dtic.mil/whs/directives/corres/pdf/500002p.pdf#page=139	

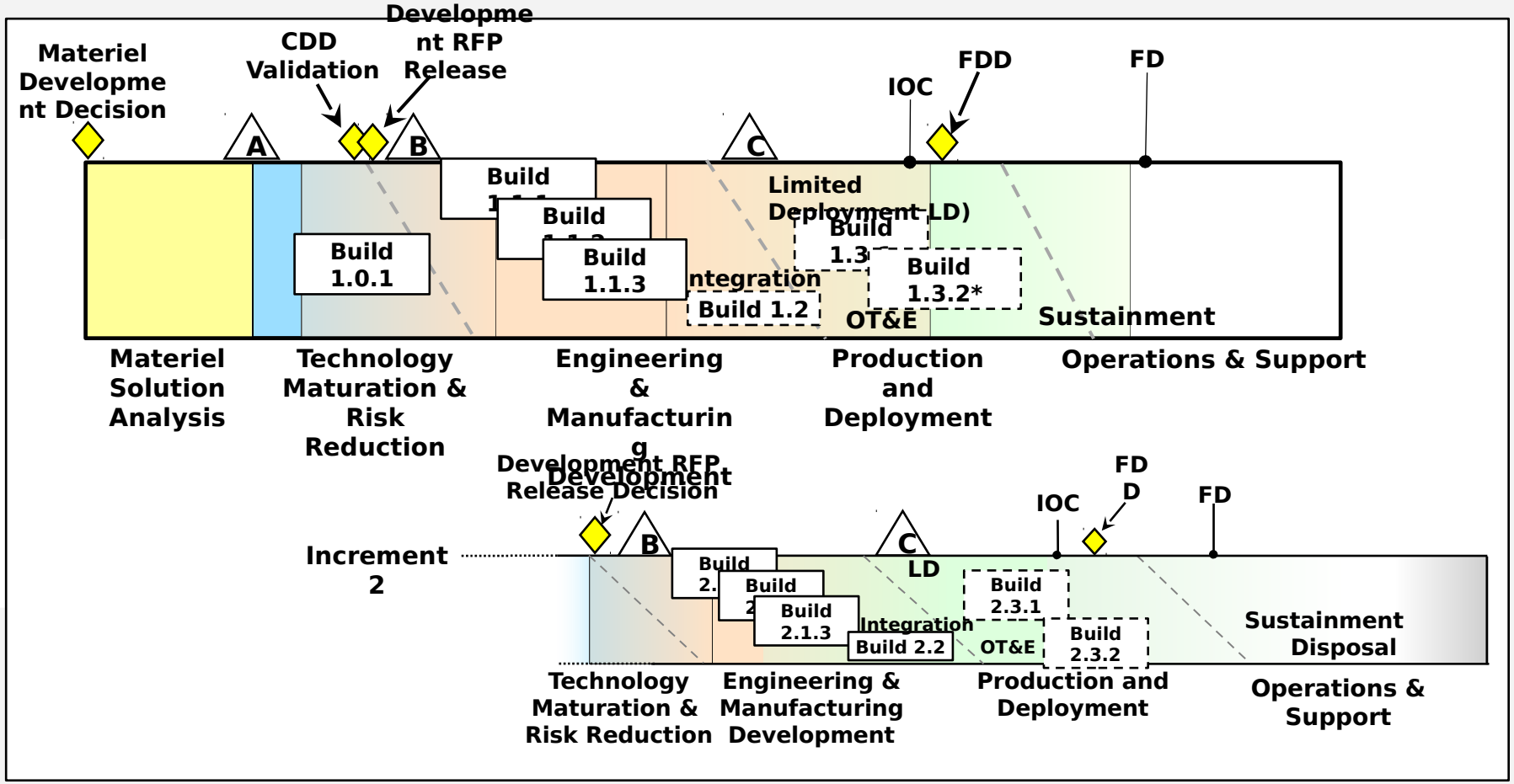
4. DBS PROBLEM STATEMENT.

Model 3: Incrementally Fielded Software Intensive Program



This model will apply in cases where commercial off-the-shelf software, such as commercial business systems with multiple modular capabilities, are acquired and adapted for DoD. This model is distinguished by the rapid delivery of capability through multiple acquisition increments, each of which provides part of the overall required program capability.

Model 6: Hybrid Program B (Software Dominant)



- Depicts how s/w intensive product development can include mix of incrementally fielded software products or releases that include intermediate software builds
- Risk Management: Highly-integrated, complex s/w & h/w development risks must be managed throughout life cycle -- special interest at decision points and milestones

Thursday: GEMSIS IT BOX CDD review responsibilities

Organization & Oversight Table 1
Chair:

Co-chairs:

GEMSIS Increment 2
JROC Approved
Oversight – STRATCOM J6
& Joint Staff J6
Program Execution
DISA/GEMSIS PMO

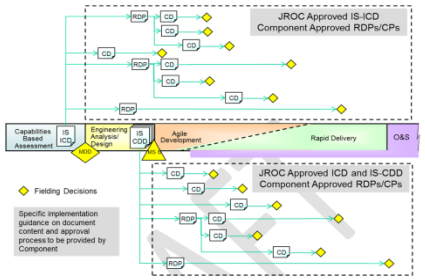
Table 2

Hardware Refresh and System Enhancements & Integration
- *Lifecycle* Cost= $ (FY
- Per year = $ M
- Rationale:

Table 4

Key Performance Parameters
- KPP#l
- KPP#2
- KPP#3

Table 5 RDP



Applications & System Software Development Table 3
- Lifecycle Cost = $ (FY__ to __)
- Per year = $

Rationale: Provide